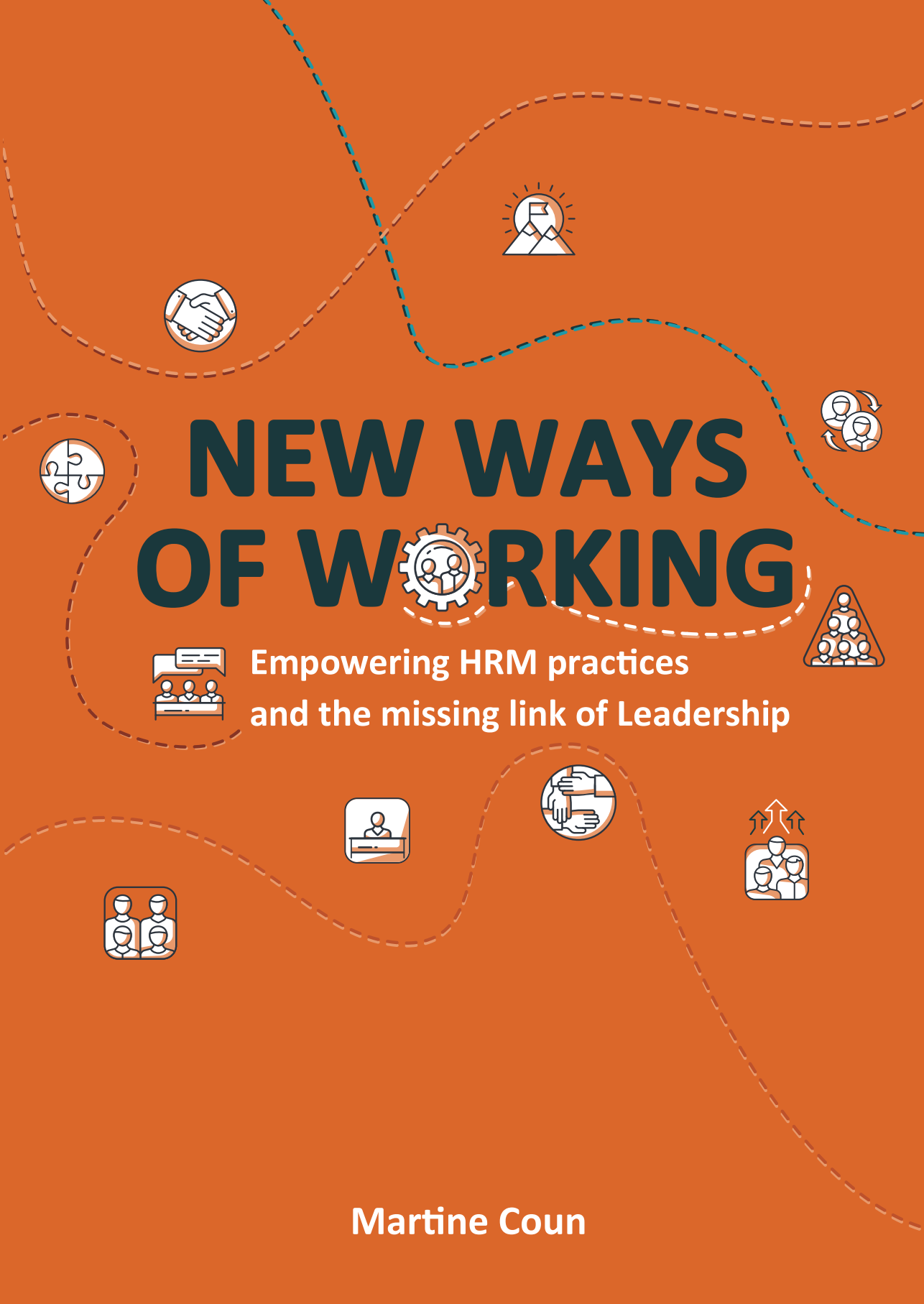
New Ways of Working


NEW WAYS
OF WORKING
Empowering HRM practices
and the missing link of Leadership
Martine Coun

New Ways of Working

Empowering HRM practices and
the missing link of leadership

Martine Coun

ISBN: 978-94-6423-118-2

Cover design & lay-out: Wendy Schoneveld || www.wenziD.nl
Printed by: Proefschriftmaken || ProefschriftMaken.nl

New Ways of Working

Empowering HRM practices and the missing link of leadership

PROEFSCHRIFT

ter verkrijging van de graad van doctor
aan de Open Universiteit
op gezag van de rector magnificus
prof. dr. Th. J. Bastiaens
ten overstaan van een door het
College voor promoties ingestelde commissie
in het openbaar te verdedigen

op vrijdag 26 februari 2021 te Heerlen
om 13.30 precies

door

Martine Jenny Henriette Coun
geboren op 15 januari 1968 te Genk

Promotores

Prof. dr. R.J. Blomme, Open Universiteit, Nyenrode Business Universiteit

Prof. dr. P. Peters, Nyenrode Business Universiteit

Leden beoordelingscommissie

Prof. dr. R. Schalk, Tilburg University

Prof dr. M. van Veldhoven, Tilburg University

Prof dr. C.P.M. Wilderom, Universiteit Twente

Prof. dr. M.C.J. Caniëls, Open Universiteit

Table of contents

CHAPTER 1

Introduction

1.1 Research context and theoretical relevance

Over the last few decades, the work environment has evolved to incorporate more diffuse organizational boundaries, the use of new technologies, and greater time-spatial flexibility. Automatization and artificial intelligence have fostered a shift from administrative, routine-based jobs to more knowledge-intensive and service–oriented work (Bruyne & Gerritse, 2018). Many organizations have explored and experimented with suitable ways of organizing work and collaborating, including flexible work practices such as remote working, virtual working and digital nomadism (Aroles, Mitev, & De Vaujany, 2019; Kelliher & Anderson, 2010). The Northern European countries, in particular the Netherlands, have developed innovative flexible workforces in line with the organizational design concept known as New Ways of Working (NWW) (Peters, Poutsma, Van der Heijden, Bakker & De Bruijn, 2014; Van der Heijden, Peters, & Kelliher, 2014). The rate of employees using information and communication technologies (ICT) in order to work flexibly ranges from 2 to 40 percent across European countries (Eurofound, 2020). However, the general trend is that developments in digital technologies have vastly increased the use of ICT, enabling individuals to work anywhere and at any time (Vuori, Helander, & Okkonen, 2019).

NWW has become a well-known workforce vision in which employees have the freedom, within certain limits, to work when, where, how and with whom (Bijl, 2009). NNW is a broad and rather ambiguous management concept, which can be interpreted and enacted in many different ways, depending on the context (Benders & Veen, 2001). Indeed, there is not a fixed set of Human Resource Management (HRM) or work practices associated with NWW. However, Erasmus University identified the five practices most commonly used in NWW contexts: flexible home working, paperless offices, open flexible workspaces, activity-based working, and knowledge sharing (Van der Meulen, 2014). Organizations may decide to implement NWW as it can provide opportunities for employees to discover new and better ways of working. NWW may offer them a challenging and stimulating work environment that can enhance personal growth and work-related flow (Baane, 2010; Peters et al., 2014).

In summary, what characterizes NWW is the combination of time and spatial flexibility supported by the active use of ICT in order to share knowledge and enable result-based working (Van der Heijden, Peters, & Kelliher, 2014). Due to the technological advances that have been made, employees have the freedom and flexibility to manage their own work by deciding when to work (instead of having fixed work schedules as is common in traditional 9 to 5 jobs), and whether to work at home or in the office, where many employees no longer have fixed workplaces (Ten Brummelhuis & Bakker, 2012). The increased freedom of employees is based on mutual trust, and goes hand in hand with

free access to and use of knowledge (Peters, Den Dulk, & De Ruijter, 2010). Innovations in technology and ICT enable virtual collaboration in autonomous working teams both within and across organizational boundaries.

Since the Microsoft white paper entitled "The New World of Work" (Gates, 2005) was published, the concept of NWW has received much attention among policy makers, practitioners and academics alike (e.g., Aroles et al., 2019; Bijl, 2009; Gajendran & Garrison, 2007; Jemine, Dubois, & Pichault, 2019; Kelliher & Anderson, 2010; Peters et al., 2014). The implementation of NWW often results in a win-win situation for everyone involved - organizations, workers, and society at large (Peters, 2011; Peters, et al., 2014). Potential societal benefits of NWW include less road traffic congestion, less pollution, and more efficient use of office space (Gajendran & Harrison, 2007; Nijp, Beckers, Van de Voorde, Geurts, & Kompier, 2016). Organizations use NWW to achieve a broad variety of business objectives, such as reducing costs, attracting talented employees and increasing productivity (Bailey & Kurland, 2002). In addition, they benefit from the increased work-life balance which can enhance employees' motivation, lower absenteeism, and increase efficiency (Blok, Groenesteijn, Schelvis, & Vink, 2012; Kossek, Thompson, & Lautsch, 2015). Due to the Covid-19 pandemic, remote working and related NWW issues have recently attracted even more attention (Kniffin, Narayanan, Anseel, Antonakis, Ashford, Bakker, & Creary, 2020).

In the management literature, particular emphasis is placed on three dimensions of NWW: 1) bricks (buildings and other physical aspects); 2) bytes (ICT-technology and use); and 3) behaviour (usually employee behaviour) (Baane, 2010). Most commonly, NWW has been studied by investigating the physical dimension of the work environment, such as the design of offices (Kingma, 2018; Kossek, Thompson, & Lautsch, 2015) and the use of alternative offices such as 'open plan offices' (Pejtersen, Fevelie, Christensen, & Burr, 2011) or virtual offices (De Paoli & Ropo, 2015). As an extension of the telework literature, some studies have focused on flexible working time (Baruch, 2000; Bailey & Kurland, 2002; Groen, Van Triest, Coers, & Wtenweerde, 2018; Kattenbach, Demerouti, & Nachreiner, 2011; Peters, Ligthart, Bardoel, & Poutsma, 2016; Sardeshmukh, Sharma, & Golden, 2012). For example, some scholars have examined time-spatial flexibility (Gerdenitsch, Kubicek, & Korunka, 2015; Sewell & Taskin, 2015; Wessels, 2017), whereas others have investigated flexible working in combination with other telecommuting-related factors such as "ICT support", for example, the mobile phone (Demerouti, Derks, Ten Brummelhuis, & Bakker, 2014).

Despite the growing number of studies related to NWW, only a few studies have investigated employees' work relationships and behaviour and how these relationships

are managed (De Kok, 2016). After all, NWW involves more than offering individuals opportunities to choose when and where to work (enabled by IT). Greater professional autonomy and accountability for employees, who are often working in (virtual) teams, has become more prevalent in modern organizations. This is in line with increased free access to and use of knowledge. In view of this, more research is needed to gain a better understanding of Baane's third dimension of NWW: the behavioural dimension (Baane, 2010). This involves shifting attention to the role of individual work relationships and how these relationships are managed in NWW contexts. In response to this current gap in the literature, there are a number of issues associated with NWW which will be addressed in this dissertation:

Workplace proactivity. First, the transition to NWW goes hand in hand with the decentralization of power. This means that employees and their teams have to rely to a greater extent on self-management and personal initiative in identifying and solving problems (Bruyne & Gerritse, 2018). Therefore, employees' workplace proactivity and initiative-taking might become greater and more decisive factors for organizational success (Parker & Bindl, 2016). Workplace proactivity assumes actively anticipating on future problems and taking the lead to actually bring out change which is important for knowledge workers who are working in self-organizing and often virtual teams. In addition, knowledge sharing becomes tremendously important and a lack of sharing information can lead to fragmentation and disruption of work processes (Foss, Pedersen, Reinholt Fosgaard, & Stea, 2015). Surprisingly, however, studies seem to have overlooked the extent to which NWW fosters employees' workplace proactivity and knowledge sharing (except Blok et al., 2012; Peters & Batenburg, 2015), and have mainly focused on more proximal outcomes (Gajendran & Harrison, 2007) such as employee wellbeing and stress (Nijp, Beckers, Geurts, Tucker, & Kompier, 2016), or health and engagement (e.g. Demerouti, Derks, Ten Brummelhuis, & Bakker, 2014; Van Steenbergen, Van der Ven, Peeters, & Taris, 2018). Other studies have investigated work-life balance (Kossek, Lautsch, & Eaton, 2006), work-related flow (Peters et al., 2014), innovative behaviour (De Spiegelaere, Van Gyes, Benders, & Van Hootegem, 2013), and productivity (Blok, Groenesteijn, Schelvis, & Vink, 2011). The present research can extend the current literature by exploring the extent to which NWW relates to employees' workplace proactivity and that of their team members. This research is timely as proactivity is increasingly in demand within modern organizations.

Perceived HRM practices. Second, pioneering research into the concept of NWW has primarily focused on the implementation of NWW as a management tool and a change process (Baane, 2011; Jemine et al., 2019). Moreover, while researchers have investigated the intended work practices related to NWW as implemented by management, less focus has been placed on how they are perceived, interpreted and used by employees. Peters

et al. (2014) argue that the intended NWW practices implemented by management, might perceived differently by their employees, and that this may affect anticipated work outcomes. Indeed, not everyone flourishes in the context of NWW (De Paoli & Ropo, 2015; Kattenbach, Demerouti, & Nachreiner, 2010). Whilst flexibility and autonomy are often promoted in work settings, they can in some circumstances also be detrimental. For example, employees with a strong preference for structure and predictability at work - and a low tolerance for ambiguity in their work - are likely to be overwhelmed by the possibilities of time- and location-independent work and increased freedom (Rietzschel, Slijkhuis, & Van Yperen, 2014). Increased work intensity combined with a greater need for self-management may limit the potentially positive effects of having more autonomy and provoke a loss of control (Biron & Veldhoven, 2016; Huws, 2017). Remote working might also cause workers to feel disconnected and distant from other colleagues and the organization itself (cf. Hislop, Axtell, Collins, Daniels, Glover, & Niven, 2015; Kossek et al., 2015). More research is needed to explore the extent to which perceived HRM practices related to NWW, as interpreted and used by employees, contribute to their workplace proactivity to meet the goals of the organization and their teams.

Leadership. Third, despite the increased adoption and popularity of NWW, up until now, the role and influence of leadership in NWW, and in relation to workplace proactivity, has been understudied. This is surprising, as scholars have already argued that one of the barriers to NWW is the lack of fit between the new work style and the leadership style (Kok, 2016; Van der Meulen, 2016). Dealing with complex structures across organizational boundaries and a shift towards flatter organizations require different leadership approaches. Indeed, management must deal with the enhanced professional autonomy of employees, the delegation of responsibilities (empowerment), and output management issues associated with distant working (Peters & Batenburg, 2015). Collaboration with colleagues becomes more and more important since employees are often co-working in one or more temporary teams, either virtually, or face to face (Hoch & Kozlowski, 2014; Jimenez, Boehe, Taras, & Caprar, 2017). However, employees' workplace proactivity calls for self-discipline which is not something everyone has in equal measure. Scholars have already emphasized that the role of management and supervisors in NWW has to change, calling for leadership adjustment by focusing on coaching and connecting employees, as well as facilitating employees and their teams (De Bruyne & Gerritse, 2018; Peters et al., 2014). This implies that supervisors need to share their power with employees by providing them with additional responsibility (Martin, Liao, & Campbell, 2013). Meanwhile, they also have to manage associated risks by being aware of the need to give direction and by monitoring social cohesion and solidarity in virtual structures. In a similar vein, sharing the leadership responsibilities within teams is becoming common practice in contemporary organizations as teams must increasingly learn to organize themselves.

Some studies on leading virtual teams have presented rather straightforward conclusions about shared leadership, by emphasizing the disadvantages of more traditional, hierarchical leadership approaches (cf. Hoch & Kozlowski, 2014). Others have promoted person-centred leadership as opposed to task-oriented leadership in NWW contexts (e.g., Stoffers, Kurstjens, & Schrijver, 2015). Baudewijns, De Grip, and Gerards (2018) concluded that organizations are unlikely to benefit from NWW when managers are unable, or unwilling, to move towards a more transformational style of leadership. These results indicate that managers are still struggling with their roles. It is clear that more research is needed as Strategic Human Resource Management scholars have also emphasized the importance of looking at managers' leadership behaviour to explain the effectiveness of HRM policies and practices in the HRM literature (Leroy, Segers, Van Dierendonck, & Den Hartog, 2018).

Employees' motivation. Finally, the flexibility and autonomy that characterize NWW are thought to offer knowledge workers challenging work and a stimulating work environment which can motivate them to engage in workplace proactivity. However, flexibility and autonomy also presuppose a greater degree of self-efficacy on the part of employees, who have to motivate themselves and rely on this to get the work done. For some employees, the loss of direct and face-to-face contact with peers can be too challenging as it affects their sense of belonging (Den Hartog & Belschak, 2012). The job characteristics model proposed by Hackman and Oldham (1976) stresses that employees' needs are important predictors of employees' responses to their work environment. More recently, there has been a growing awareness of the importance of the fulfilment of psychological needs in the workplace (Hetland, Hetland, Bakker, Demerouti, Andreassen, & Pallesen, 2015). Empirical studies have shown that HRM practices - as well as the interpretation of the role of the supervisor - directly contribute to the satisfaction of basic psychological needs (De Cooman, Stynen, Van den Broeck, Sels, & De Witte, 2013; Gagné & Deci, 2005).

In this regard, self-determination theory (SDT) (Deci & Ryan, 2000) provides an interesting theoretical lens that can be used to explore how HRM practices associated with NWW and leadership can foster workplace proactivity in relation to both organizational and team goals. In addition, the concept of psychological empowerment particularly resonates with the importance of autonomous motivation among employees to perform (Spreitzer, 1995), and might shed further light on this issue. Empowerment has important consequences, as management has to deal with the increased autonomy of the employee and an increased delegation of responsibilities. Moreover, empowerment is particularly important in virtual settings where face-to-face interactions are not always possible (Kirkman, Rosen, Tesluk, & Gibson, 2004), and where team members need to be more proactive. In summary, self-determination and psychological empowerment theories could yield more insights into employees' needs and motivation.

To conclude, despite the growth of research on flexible work practices (De Menezes & Kelliher, 2011; Kelliher & De Menezes, 2019), and NWW (e.g., Aroles et al., 2019), the current body of knowledge is somewhat lacking when it comes to understanding employees' behaviours and how best to manage these behaviours in NWW contexts. Complex organizational structures and a shift to flatter organizations have forced employees and their teams to rely more on self-management and self-organization. However, studies have overlooked certain aspects of employees' workplace proactivity – for example knowledge sharing, which has become more and more important for individual, team, and organizational success (Bruyne & Gerritse, 2018). Researchers have tended to focus on the advantages and drawbacks of the implementation of NWW in terms of the physical work environment and the influence of technology and ICT. However, they have barely taken into account the more behavioural aspects resulting from the increased autonomy, accountability and result-based working associated with NWW, and have neglected to address how employees perceive related HRM practices. Even more apparent distressing is the lack of academic research on the shifting role of leadership in these contexts. The role of vertical, hierarchical and more horizontal leadership approaches remains unclear - particularly how these play a role in motivating workers to contribute to the goals of their teams and their organization.

1.2 Research questions and dissertation overview

1.2.1 Problem statement and research questions

The motivation behind the studies outlined in this dissertation stems from the increasing importance and relevance of research addressing different aspects of NWW. Our aim was to build on the existing body of NWW research and to address the current gaps and limitations in the literature as outlined above. Our research bridges the HRM and the leadership literature (Leroy, et al., 2018) by examining the relationships between perceived HRM practices and leadership approaches associated with NWW and employees' workplace proactivity. Furthermore, we explore how this relationship is mediated by self-determination and psychological empowerment. Self-determination theory (SDT) (Deci & Ryan, 2000; Ryan, & Deci, 2017) and psychological empowerment theory (Spreitzer, 1995) were chosen as lenses through which to examine the core concepts explored in this dissertation all of which rely upon the autonomous motivation of employees to perform.

The central research question of this dissertation is formulated as follows:

To what extent are perceived HRM practices and leadership related to workplace proactivity, and to what extent do self-determination and psychological empowerment mediate these relationships?

This central research question can be divided in four sub-questions:

1. What is the potential contribution of perceived HRM practices and leadership approaches associated with NWW in fostering workplace proactivity, and how can self-determination theory help to explain these relationships?
2. To what extent are NWW and shared leadership related to workplace proactivity? What are the differences in terms of workplace proactivity and shared leadership between employees that have access to NWW practices and those who do not?
3. To what extent do shared leadership and the transformational leadership style of the hierarchical leader relate to knowledge sharing behaviour among peers, and what is the mediating role of self-determination via the fulfilment of employees' basic psychological needs in this relationship?
4. To what extent do empowering HRM practices (in this study professional autonomy, workplace flexibility and access to knowledge via ICT) and empowering leadership have the potential to foster workplace proactivity, and what is the mediating role of psychological empowerment in this relationship?

These sub-questions are each be addressed in separate studies that together aim to answer the overarching research question. The outcomes of these studies are expected to benefit employees, managers, and Human Resource professionals, who can use these insights to face future challenges and create opportunities for new ways of organizing work.

1.2.2 Studies and dissertation outline

In this dissertation, four distinct studies are presented in the subsequent chapters.
The first study, reported in Chapter 2, is a conceptual study whilst the second, third and fourth studies, reported in Chapters 3 to 5, are distinct and related empirical studies. Each study elaborates on and investigates different aspects of the central research question. These four chapters are summarized in the present introductory chapter (Chapter 1). Each chapter discusses the theoretical and practical implications of the particular study. In chapter 6, the main findings of Chapters 2 to 5 are summarized and a general discussion is presented. In addition, several avenues for future research are proposed and implications

for management are addressed. In the following section, the different studies are introduced and their methodology is described. Figure 1.1 presents a graphical representation of the dissertation.

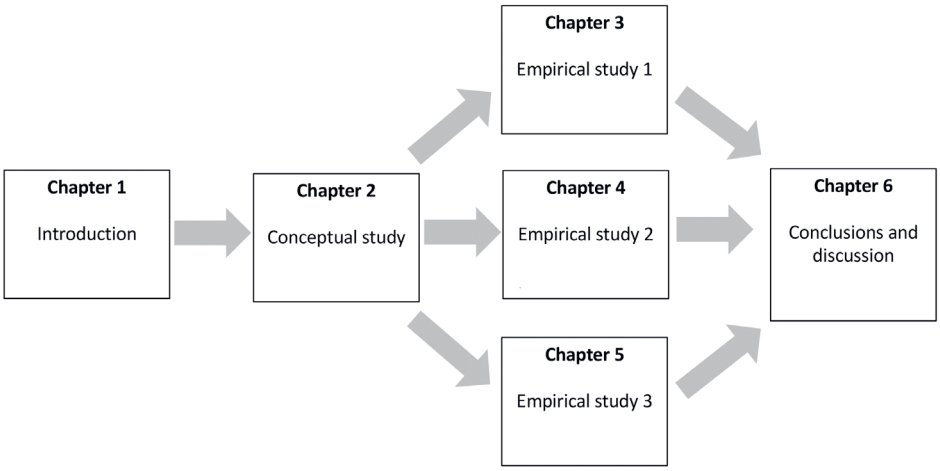


Figure 1.1 Outline of the dissertation

Study 1: Linking HRM practices and leadership in motivating employees to enhance workplace proactivity in NWW contexts. (Chapter 2)

In this conceptual study, we examined the appropriateness of different HRM work practices related to NWW and the potential role of leadership in stimulating workplace proactivity. For the purposes of this study, NWW can be defined as the adoption of HRM practices that are often associated with NWW. Self-determination theory was used as a useful lens through which to examine the importance of employees' basic needs fulfilment and help us understand how HRM practices in the context of NWW can enhance employees' autonomous motivation. Considering leadership as an important management practice within the NWW context, can be a powerful connection with the HRM system and can help to identify which kind of leadership is appropriate. We therefore explored leadership styles and approaches which are considered to be promising within the context of NWW and can be linked to followers' motivation. Drawing on existing research that has investigated flexible work arrangements, NWW and leadership, we explored several potential leadership approaches (empowering, shared, transformational, and transactional leadership) in Study 1. Moreover, we developed several propositions of which some will be tested in this dissertation, and outline recommendations for managerial NWW practices.

Study 2: Shared leadership and proactivity in NWW contexts (Chapter 3)

This first empirical quantitative, quasi-experimental study focused on the extent to which the introduction of NWW - and in particular sharing leadership among team members - can contribute to workplace proactivity. The aim of the study was to contribute to the NWW literature by examining the extent to which shared leadership is an important leadership approach within NWW. In addition, the study examined the relationship between the adoption of NWW and workplace proactivity of the individual employee and of the team members. Within the context of NWW, teams have greater flexibility, autonomy, and the possibility to organize their work in an independent manner. It can therefore be expected that employees operating in NWW contexts will be more inclined to display workplace proactivity. A quasi-experimental research design was set-up to measure the effects of NWW on shared leadership and workplace proactivity. The study was conducted in an organization in the financial sector which had intended to implement NWW across the whole organization. Due different external factors, however, the implementation of NWW had been delayed. As a consequence, a group of employees from the IT & Change department who already operated according the principles of NWW could be compared with a group of employees who did not (yet).

Study 3: 'Let's share!' The mediating role of employees' self-determination in the relationship between transformational and shared leadership and perceived knowledge sharing among peers (Chapter 4)

In this second empirical quantitative study, we explored the roles of both shared leadership and the transformational leadership style of the hierarchical leader within an NWW context. The aim was to gain more theoretical and empirical insights into the extent to which transformational leadership of the formal leader and shared leadership are related. In addition, the study examined the relationship between leadership and knowledge sharing (which is becoming a major risk factor in NWW as digital collaboration becomes more commonplace). Self-determination theory (SDT) was used as a theoretical lens through which to explain the underlying mechanisms involved in the relationship between leadership and knowledge sharing. A field study was conducted in two R&D units of a company in the sector of food for special medical purposes in the Netherlands. Data were collected from knowledge workers who work according to the principles of NNW. The activities of these knowledge workers are characterized by their collaboration in teamwork for which they are jointly held responsible. The complexity of the tasks in which these knowledge workers are involved supposes that sharing knowledge is vital to new product development.

Study 4: 'To empower or not to empower, that's the question': Using an empowerment process approach to explain employees' workplace proactivity (Chapter 5)

The third empirical quantitative study investigated to what extent empowering HRM practices (i.e., workplace flexibility, professional autonomy, and access to knowledge via ICT) and empowering leadership have the potential to motivate employees to display workplace proactivity. The study builds on empowerment theory to gain a better understanding of how supervisors or managers and employees are able to make choices to achieve their work goals, and how empowering leadership can support this. In addition, the aim of this study was to foster our understanding of how HRM practices and empowering leadership contribute to influencing employee outcomes by connecting the HRM and the leadership literature (Leroy, et al., 2018). While HRM is more focused on the processes and systems within an organization, leadership is more closely related to the individual employee. A field study was conducted in four subsidiaries of a large Dutch bank active in the financial sector in the Netherlands. This bank has made the transition to working with self-managing teams who have greater autonomy. The organization had implemented this new way of working in order to enhance customer service and increase employee satisfaction. Within this new approach, managers were expected to support and empower the teams, promote self-management of the employees and become less controlling.

1.2.3 Dissemination of the dissertation

Chapters 2 to 5 are based on stand-alone papers. These studies and related research proposals have been accepted for and/or presented at several international conferences such as the AOM (Academy of Management conference), EAWOP (European Association of Work and Organizational Psychology conference), EAWOP Small Group Meeting, EURAM (European Academy of Management), the Dutch HRM Conference and finally the Work and Family Researchers Network Conference. Sections of Chapter 2, Chapter 3 and Chapter 4 have been published and Chapter 5 has been accepted for an international peer reviewed journal.

References

Aroles, J., Mitev, N., & de Vaujany, F. X. (2019). Mapping themes in the study of new work practices. *New Technology, Work and Employment*, *34*(3) 285-299.

Baane, R., Houtkamp, P., & Knotter, M. (2010). *The new world of work unraveled. (In Dutch: Het nieuwe werken ontrafeld*). Uitgeverij Van Gorcum.

Baane, R. (2011). The new world of work unraveled: Bricks, bytes & Behaviour. (In Dutch: Het Nieuwe Werken ontrafeld. Over Bricks, Bytes & Behavior). *Tijdschrift voor HRM*, *141*(1), 7-23.

Baruch, Y. (2000). Teleworking: benefits and pitfalls as perceived by professionals and managers. *New Technology, Work and Employment*, *15*(1), 34-49.

Benders, J., & Van Veen, K. (2001). What's in a fashion? Interpretative viability and management fashions. *Organization*, *8*(1), 33-53.

Bijl, D. (2009). *Starting with New Ways of Working*. (In Dutch: Aan de slag met Het Nieuwe Werken). Zeewolde: Par CC.

Blok, M.M., Groenesteijn, L., Schelvis, R. & Vink, P. (2012). New ways of working: does flexibility in time and location of work change work behavior and affect business outcomes? *Work: A Journal of Prevention, Assessment & Rehabilitation*, *41*(1), 5075-5080.

Biron, M., & van Veldhoven, M. (2016). When control becomes a liability rather than an asset: Comparing home and office days among part-time teleworkers. *Journal of Organizational Behavior*, *37*(8), 1317-1337.

Bruyne, E. D., & Gerritse, D. (2018). Exploring the future workplace: results of the futures forum study. *Journal of Corporate Real Estate*, *20*(3), 196–213.

De Cooman, R., Stynen, D., Van den Broeck, A., Sels, L., & De Witte, H. (2013). How job characteristics relate to need satisfaction and autonomous motivation: Implications for work effort. *Journal of Applied Social Psychology*, *43*(6), 1342-1352.

Den Hartog, D. N., & Belschak, F. D. (2012). When does transformational leadership enhance employee proactive behavior? The role of autonomy and role breadth self-efficacy. *Journal of Applied Psychology*, *97*(1), 194-202.

Demerouti, E., Derks, D., Ten Brummelhuis, L. L., & Bakker, A. B. (2014). New Ways of Working: Impact on Working Conditions, Work–Family Balance, and Well-Being. In C. Korunka & P. Hoonakker (Eds.), *The Impact of ICT on Quality of Working Life* (pp. 123-141). Dordrecht, The Netherlands: Springer.

De Spiegelaere, S., Van Gyes, G., Benders, J., & Van Hootegem, G. (2013). Wat werkt van Het Nieuwe Werken? *Tijdschrift van het Steunpunt* WSE, *23*(3), 66-72.

De Menezes, L. M., & Kelliher, C. (2011). Flexible working and performance: A systematic review of the evidence for a business case. *International Journal of Management Reviews*, *13*(4), 452-474.

De Paoli, D., & Ropo, A. (2015). Open-plan offices-the response to leadership challenges of virtual project work? *Journal of Corporate Real Estate*, *17*(1), 63-74.

Eurofound (2020). *Telework and ICT-based mobile work: Flexible working in the digital age, New forms of employment series.* Luxembourg: Publications Office of de European Union.

Foss, N. J., Pedersen, T., Reinholt Fosgaard, M., & Stea, D. (2015). Why complementary HRM practices impact performance: The case of rewards, job design, and work climate in a knowledge-sharing context. *Human Resource Management*, *54*(6), 955-976.

Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, *26*(4), 331-362.

Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology*, *92*(6), 1524-1541.

Gates, B. (2005). The new world of work. Retrieved March 13, 2015 from http://www.microsoft.com/mscorp / execmail/2005/05-19newworldofwork.mspx

Gerards, R., de Grip, A., & Baudewijns, C. (2018). Do new ways of working increase work engagement? *Personnel Review*, *47*(2), 517 -534.

Gerdenitsch, C., Kubicek, B., & Korunka, C. (2015). Control in Flexible Working Arrangements. *Journal of Personnel Psychology*, *14*(2), 61-69.

Groen, B. A., van Triest, S. P., Coers, M., & Wtenweerde, N. (2018). Managing flexible work arrangements: Teleworking and output controls. *European Management Journal*, *36*(6), 727-735.

Hetland, J., Hetland, H., Bakker, A. B., Demerouti, E., Andreassen, C. S., & Pallesen, S. (2015). Psychological need fulfillment as a mediator of the relationship between transformational leadership and positive job attitudes. *Career Development International*, *20*(5), 464-481.

Hislop, D., Axtell, C., Collins, A., Daniels, K., Glover, J., & Niven, K. (2015). Variability in the use of mobile ICTs by homeworkers and its consequences for boundary management and social isolation. *Information and Organization*, *25*(4), 222-232.

Hoch, J. E., & Kozlowski, S. W. (2014). Leading virtual teams: Hierarchical leadership, structural supports, and shared team leadership. *Journal of Applied Psychology*, *99*(3), 390-403.

Jemine, G., Dubois, C., & Pichault, F. (2019). From a new workplace to a new way of working: legitimizing organizational change. *Qualitative Research in Organizations and Management: an International Journal*. https://doi 10.1108/QROM-10-2018-1690

Jimenez, A., Boehe, D. M., Taras, V., & Caprar, D. V. (2017). Working across boundaries: Current and future perspectives on global virtual teams. *Journal of International Management*, *23*(4), 341-349.

Kattenbach, R., Demerouti, E., & Nachreiner, F. (2010). Flexible working times: Effects on employees' exhaustion, work-nonwork conflict and job performance. *Career Development International*, *15*(3), 279-295.

Kelliher, C., & Anderson, D. (2010). Doing more with less? Flexible working practices and the intensification of work. *Human Relations*, *63*(1), 83-106.

Kelliher, C., & De Menezes, L. M. (2019). *Flexible Working in Organisations: A Research Overview*. Routledge.

Kingma, S. (2019). New ways of working (NWW): work space and cultural change in virtualizing organizations. *Culture and Organization*, *25*(5), 383-406.

Kirkman, B. L., Rosen, B., Tesluk, P. E., & Gibson, C. B. (2004). The impact of team empowerment on virtual team performance: The moderating role of face-to-face interaction. *Academy of Management Journal*, *47*(2), 175-192.

Kniffin, K. M., Narayanan, J., Anseel, F., Antonakis, J., Ashford, S. P., Bakker, A. B., et al. (2020). COVID-19 and the workplace: Implications, issues, and insights for future research and action. *American Psychologis*t. https://doi.org/10.1037/amp0000716

Kossek, E. E., Thompson, R. J., & Lautsch, B. A. (2015). Balanced Workplace Flexibility. *California Management Review*, *57*(4), 5-25.

Leroy, J., Segers, J., Van Dierendonck, D., & Den Hartog, D. (2018). Managing people in organizations: Integrating the study of HRM and leadership, *Human Resource Management Review*, *28*(3), 249-257.

Martin, S. L., Liao, H., & Campbell, E. M. (2013). Directive versus empowering leadership: A field experiment comparing impacts on task proficiency and proactivity. *Academy of Management Journal, 56(*5), 1372-1395.

Nijp, H. H., Beckers, D. G., van de Voorde, K., Geurts, S. A., & Kompier, M. A. (2016). Effects of new ways of working on work hours and work location, health and job-related outcomes. *Chronobiology International*, *33*(6), 604-618.

Parker, S. K., & Bindl, U. K. (2016). Proactivity at work: A big picture perspective on a construct that matters. In Parker, S. K. & U. K. Bindl (Eds.), *Proactivity at Work Making: Things Happen in Organizations.* Routledge (pp. 19-38). New York, USA: Routledge: Routledge.

Pejtersen, J. H., Feveile, H., Christensen, K. B., & Burr, H. (2011). Sickness absence associated with shared and open-plan offices—a national cross sectional questionnaire survey. *Scandinavian Journal of Work, Environment & Health*, 376-382.

Peters, P. & Batenburg, R. (2015). Telework adoption and formalization in organizations from a knowlegde transfer perspective. *International Journal of Work Innovation*, *1*(2/3), 251-270.

Peters, P., Den Dulk, L., & de Ruijter, J. (2010). May I work from home? Views of the employment relationship reflected in line managers' telework attitudes in six financial-sector organizations. *Equality, Diversity and Inclusion: An International Journal*, *29*(5), 517-531.

Peters, P., Poutsma E., Van der Heijden B., Bakker A.P., & De Bruijn, A. (2014). Enjoying new ways to work: An HRM-process approach to study flow. *Human Resource Management*, *53*(2), 271–290.

Peters, P., Ligthart, P. E., Bardoel, A., & Poutsma, E. (2016). 'Fit' for telework'? Cross-cultural variance and task-control explanations in organizations' formal telework practices. *The International Journal of Human Resource Management*, *27*(21), 2582-2603.

Peters, P., Den Dulk, L., & Van der Lippe, T. (2009). The effects of time-spatial flexibility and new working conditions on employees' work–life balance: The Dutch case. *Community, Work & Family*, *12*(3), 279-297.

Rietzschel, E. F., Slijkhuis, M., & Van Yperen, N. W. (2014). Close monitoring as a contextual stimulator: How need for structure affects the relation between close monitoring and work outcomes. *European Journal of Work and Organizational Psychology*, *23*(3), 394-404.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*(1), 68-78.

Sewell, G., & Taskin, L. (2015). "Out of sight, out of mind in a new world of work? Autonomy, control, and spatiotemporal scaling in telework", *Organization Studies*, *36*(11), 1507-1529.

Sardeshmukh, S. R., Sharma, D., & Golden, T. D. (2012). Impact of telework on exhaustion and job engagement: A job demands and job resources model. *New Technology, Work and Employment*, 27(3), 193-207.

Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, 38(5), 1442-1465.

Stoffers, J., Kurstjens, J., & Schrijver, I. (2015). Leadership and New Ways of Working: A Case Study in a Financial Service Organisation. *Journal of Business and Economics Research*, *4*(3), 157-162.

Ten Brummelhuis, L. L., Bakker, A. B., Hetland, J., & Keulemans, L. (2012). Do new ways of working foster work engagement? *Psicothema*, *24*(1), 113-120.

Van der Heijden, B. I. J. M., Peters, P., & Kelliher, C. (2014). New ways of working and employability. Towards an agenda for HRD. In R.F. Poell, T.S. Rocco, & G.L. Roth (Eds.), *The Routledge Companion to Human Resource Development* (pp. 542-551). London, UK: Routledge.

Van der Meulen N. (2014). *Status of the New Way of Working: Results of the National NWOW Barometer 2013* (In Dutch: De staat van Het Nieuwe Werken: Resultaten van de Nationale HNW Barometer 2013). Erasmus University Rotterdam, Rotterdam. Retrieved March 13, 2018 from http://www.kennisbanksocialeinnovatie.nl/nl/kennis/kennisbank/de-staat-van-het-nieuwe-werken--resultaten-van-de-nationale-hnw-barometer-2013/1184

Van der Meulen, N. (2016). *The Distance Dilemma: The effect of flexible working practices on performance in the digital workplace* (Doctoral dissertation). Erasmus University Rotterdam, Rotterdam. Retrieved September 25, 2019 from http://hdl.handle.net/1765/94033

Van Steenbergen, E. F., Van der Ven, C., Peeters, M. C., & Taris, T. W. (2018). Transitioning towards new ways of working: do job demands, job resources, burnout, and engagement change? *Psychological Reports*, *121*(4), 736-766.

Vuori, V., Helander, N., & Okkonen, J. (2019). Digitalization in knowledge work: the dream of enhanced performance. *Cognition, Technology & Work*, *21*(2), 237-252.

Wessels, C. (2017). *Flexible working practices: How employees can reap the benefits for engagement and performance* (Doctoral dissertation). Erasmus University Rotterdam, Rotterdam. Retrieved September 25, 2019 from hdl.handle.net/1765/99312

CHAPTER 2

Linking HRM practices and leadership in motivating employees to enhance workplace proactivity in NWW contexts

A preliminary part of this chapter is published as Coun, M.J.H., Peters, P., & Blomme, R.J. (2019). Taking the leadership role: Understanding leadership across team and organizational boundaries in view of the changing employment relationship. *Journal of Leadership Studies*, *12*(4), 65-68. An adapted additional version of this chapter was accepted as a full paper for the 19th EURAM Conference June 26th-28th 2019, Lisbon, and presented at the 19th EAWOP Conference, May 29th-June 1st 2019, Turin.

Summary

This conceptual study, by building on the idea of bridging the literature on HRM and leadership, has the aim of enhancing our understanding of the role of HRM practices and leadership approaches in fostering workplace proactivity in NWW contexts. NWW can be described as an HRM system comprising a selected set of HRM practices (time-spatial flexibility, professional autonomy, accountability, access to knowledge via ICT) and corresponding leadership approaches. Self-determination theory is used as a useful lens through which to examine the importance of employees' basic needs fulfilment (the need for autonomy, competence, and relatedness) and to help us understand how HRM practices in the context of NWW can enhance employees' autonomous motivation. Considering leadership as a management practice within NWW contexts can provide powerful connections between the HRM and the leadership literature and can help us to identify which kind of leadership approach is most suited to managing these kinds of work relationships. This study outlines several promising leadership styles within the context of NWW that have been associated with followers' motivation. The potential roles of transformational, transactional, and empowering leadership styles, and in addition shared leadership, are examined in this chapter, as they are suitable in NWW work contexts. Finally, the link between hierarchical, vertical and horizontal leadership is explored.

2.1 Introduction

Over the past few decades, organizations have shown a growing interest in New Ways of Working (NWW) to enhance employee empowerment and stimulate workplace proactivity. Workplace proactivity can be defined as "self-initiated and future oriented action that aims to change and improve the situation or oneself" (Parker, Williams, & Turner, 2006: 636). With the rise in complex and unpredictable work environments, workplace proactivity has become increasingly important for its role in enhancing effectiveness, efficiency, creativity and innovation (at both employee and organizational levels). NWW can be regarded as an HRM system that involves a new way of designing work activities based on a workforce philosophy referring to the values, assumptions and beliefs about employees (Bijl, 2009), and supported by a coherent set of management practices (Kaarsemaker & Poutsma, 2006; Ulrich & Dulebohn, 2015). Despite the growing societal and scholarly interest in NWW, there is little insight into how new ways of working can be managed in order to stimulate foster workplace proactivity. In the following the contribution to the literature is outlined.

First, in order to predict behavioural responses such as workplace proactivity, the HRM literature emphasises the importance of taking into account employee perceptions regarding an organization's intended HRM practices (Nishii & Wright, 2008). Employee ratings of HRM practices have been shown to be much more predictive of employee behaviours and outcomes than managerial reports (Kehoe & Wright, 2013). We therefore need to understand how HRM practices are perceived when predicting and explaining workplace proactivity in NWW contexts. Some studies have already identified perceived professional autonomy and accountability, teamwork, and output management as important HRM practices in NWW contexts that can enhance work-related flow (Peters, Kraan, & Echtelt, 2013; Peters, Poutsma, Van der Heijden, Bakker & De Bruijn, 2014). However, studies that have focused on the relationship between perceived HRM practices associated with NWW and workplace proactivity are scarce. Studies to date have mainly focused on the association between HRM practices that are used to monitor and indirectly control people - such as reward systems, selection, and training - and workplace proactivity (e.g., Arefin, Arif, & Raquib, 2015; Batistič, Černe, Kaše, & Zupic, 2016; Chen, Lyu, Li, Zhou, & Li, 2017). However, for both organizations and employees, it is important to know how employees can motivate themselves and their colleagues to act (Peters, Ligthart, Bardoel, & Poutsma, 2016). Therefore, in this study, we further elaborate on the concept of NWW as a comprehensive set of perceived HRM work practices which can be expected to empower employees.

Second, the HRM literature acknowledges that there is a lack of insight into the theoretical foundations explaining the relationship between HRM practices and performance (Boselie, Dietz, & Boon, 2005; Guest, 2011; Paauwe, 2009; Wright, Gardner, Moynihan, & Allen, 2005). In both the psychological and the SHRM literature, however, there is a growing awareness of the importance of fulfilling employees' psychological needs for autonomy, competence and relatedness in the workplace (Deci & Ryan, 2000; Deci & Ryan, 2014), as this can motivate and stimulate employees to achieve their work goals more efficiently and effectively (Boxall & Macky, 2009; Hetland, Hetland, Bakker, Demerouti, Andreassen, & Pallesen, 2015). In order to address this gap in the literature, we use self-determination theory (SDT) (Van den Broeck, Vansteenkiste, Lens, & De Witte, 2010) as a theoretical lens through which to examine how NWW (as an innovative HRM system) can motivate employees and ultimately increase workplace proactivity. The concept of psychological empowerment, and how this relates to the autonomous motivation of employees to perform (Spreitzer, 1995), is also explored.

Third, although SHRM scholars have emphasized the importance of taking into account managers' leadership behaviour to explain the effectiveness of HRM policies and practices, leadership is a neglected aspect of the HRM system in the HRM literature (Leroy, Segers, Van Dierendonck, & Den Hartog, 2018; McDermott, Conway, Rousseau, & Flood, 2013). NWW not only requires the adoption of empowering HRM practices to motivate employees, but also demands adjusted leadership approaches which enable workers to act in a more proactive way. Since NWW not only implies employees' empowerment but also involves team-based work with group-level responsibility, more trust-based and coaching-oriented styles of leadership are needed. By delegating responsibilities to the team, more horizontal approaches - such as shared leadership - will become more prevalent. Therefore, in order to understand employees' workplace proactivity, in addition to empowering HRM practices, the focus needs to be on the role of leadership as a management practice.

In summary, by building on the idea of bridging the literature on HRM and leadership, this study enhances our understanding of the role of HRM practices and leadership in fostering workplace proactivity in NWW contexts. NWW is viewed as an HRM system comprising a set of HRM practices characterizing NWW as well as corresponding leadership approaches. It has been suggested that the combination of HRM practices and leadership approaches used in the context of NWW has a positive effect on the HRM system, and enables workers to satisfy their psychological needs for autonomy, competence and belonging. In order to improve the performance of both workers and organizations, it has been argued that NWW should comprise HRM practices and leadership approaches geared towards enhancing employees' ability, motivation and opportunity (AMO) to achieve their

individual goals, their team goals and the organizational goals (Appelbaum, Bailey, Berg, & Kalleberg, 2000; Bowen & Ostroff, 2004).

This conceptual study is organized as follows. First, we discuss HRM work practices characterizing NWW contexts. Second, we introduce self-determination theory (Deci & Ryan, 2000) as a lens through which to explore the influence of these HRM practices on employees' psychological needs fulfilment and the potential they have to enhance autonomous motivation to enact workplace proactivity. Third, we explore different leadership styles which can be viewed as supportive management practices, and can boost employees' motivation in NWW contexts. The study concludes with a discussion of the theoretical contributions, avenues for future research, and managerial implications.

2.2 Theoretical background and propositions

2.2.1 Perceived HRM practices associated with NWW

NWW is a broad concept associated with different combinations of working practices, related to bricks (building and physical aspects), bytes (ICT-technology and use) and behaviour (employee behaviour) (Baane, 2010). Most scholars have focused on the so-called physical and virtual or ICT aspects of NWW (e.g., Demerouti, Derks, Ten Brummelhuis, & Bakker, 2014; Kingma, 2019). Other researchers have explored the more behavioural aspects of NWW related to employees' work relationships. As such, they consider autonomy and accountability, teamwork, trust, and output management as the key work principles of NWW (Bijl, 2009; Peters, Kraan, & Van Echtelt, 2013; Peters et al., 2014). In line with this, Baane (2011) identified four work principles that can foster the behavioural outcomes that organizations hope to achieve in NWW contexts: (1) Time- and location-free work: 'Anytime, anywhere'; (2) Steering workers towards achieving results: 'Manage your own work'; (3) Free access to and use of knowledge, experiences, and ideas: 'Unlimited access and connectivity'; (4) Flexible work relationships: 'My size fits me', as opposed to 'One size fits all'. Researchers investigating empowerment have identified organizational practices such as information sharing, autonomy through boundaries, and accountability, which can contribute to an "empowerment climate" (Seibert, Silver, & Randolph, 2004).

Since the idea of NWW is to enhance employee empowerment in order to stimulate workplace proactivity, we focus and elaborate on HRM practices which can be expected to empower employees. Employees, often working in different teams, are more self-directed and can make their own decisions. Due technological developments, employees

increasingly have the flexibility to work remotely and have access to knowledge and information which allow them to perform at a higher level. Therefore, in this conceptual study, we pay particular attention to access to knowledge, time and spatial flexibility, and professional autonomy, as these practices can be regarded as having the potential to contribute to employees' workplace proactivity.

Access to knowledge. Working according to the principles of NWW assumes that employees or their teams are able to work independently to achieve their goals without the active interference of managers. This result-based working supposes delegation of and participation in decision making (Child, 2015). Giving employees free access to information, experiences and knowledge, allowing them to use and share it, is one of the core practices in NWW (Baane et al., 2010). Employees should have the appropriate information and resources available, at all times and in all places, to be able to work together at home, on the road, or in the office. Nowadays, many organizations use social ICT and online knowledge management platforms to enhance virtual collaboration inside and across the boundaries of their organization. Collecting and sharing knowledge and information and being active in social networks fits well with the preferences and skills of knowledge workers (Liu & De Frank, 2013).

Time-spatial flexibility. In the context of NWW, employees are allowed to work remotely (e.g., at home, at a client's premises, in the train, or in a coffee shop), but also at various places in the office environment, and at a time that they choose. This activity-based working principle allows employees to decide for themselves either to work in quiet areas, open office areas, meeting rooms, or brainstorming rooms (Kelliher, & De Menezes, 2019). Time-spatial flexibility assumes that employees have the ability to make choices to arrange where (place), when (time) and for how long they work (Hill, Grzywacz, Allen, Blanchard, Matz-Costa, Shulkin, & Pitt-Catsouphes, 2008). Knowledge workers often work in teams. These teams can be co-located or virtual (virtual teams are especially useful when team members work in different time zones). Offering employees time-spatial flexibility enables them to organize their work activities and non-work activities appropriately (Van der Heijden, Peters, & Kelliher, 2014). This workplace flexibility often increases the availability of employees for consultation.

Professional autonomy. This temporal and spatial flexibility of workers provides increased freedom of choice and theoretically creates a high degree of professional autonomy (Gerdenitsch, Kubicek, & Korunka, 2015). Employees are not only able to determine where and when they want to work, but also how and with whom (Bijl, 2009). Professional or job autonomy refers to the extent to which a job allows employees discretion, freedom and independence in the execution of job-related tasks. Hackman and Oldman (1976)

define autonomy as one of five core job characteristics that affect work outcomes, alongside task identity, task significance, variety of skills and feedback. In this study, we define professional autonomy as the degree to which a job provides discretion over daily work decisions, such as how to schedule work and how to complete tasks (Hackman & Oldham, 1976; Morgeson & Humphrey, 2006). As work in modern society becomes more complex, and direct control of professional work processes becomes increasingly difficult, job autonomy has gained importance as a central feature of professional and knowledge work (Krausert, 2014). Working remotely is something that demands bounded trust (Handy, 1995), but also promotes a stronger focus on results, replacing a previous emphasis on working hours and physical presence (Henttonen & Blomqvist, 2005). Employees have more freedom but also face a rising number of responsibilities emerging from particular agreements about achieving results. In fact, work results tend to be more important than the number of hours actually worked. Peters et al. (2014) point out that in recent decades, accountability concerning the execution of work activities has increasingly shifted toward the employee.

2.2.2 Motivating employees in the HRM system

Self-determination theory (SDT) (Deci & Ryan, 2000) can contribute to our understanding of how empowering HRM practices and leadership approaches associated with NWW relate to or have impact on employees' behaviour, such as workplace proactivity. This theory suggests that there are different types of motivation, ranging from autonomous to controlled motivation, which can energize and influence employees' behaviour.

Autonomous motivation is characterized by employees' engagement in a work activity they have chosen to do, and not been directed or forced to carry out (Deci & Ryan, 2000). Often autonomously regulated work activities are *intrinsically* motivating as employees experience pleasure as an inherent part of the work activity itself. However, probably more important in the workplace are the *extrinsically* motivating work activities which can also be autonomously motivating. When employees consider their work to be important and valuable in view of the intended outcomes, this autonomous motivation is *identified regulated* (Deci & Ryan, 2000; Deci, Olason, & Ryan, 2017). Whilst when employees feel autonomy and ownership in their work which has become an integrated part of an individual's value system and self-identity, then the autonomous motivation is *integrated regulated*.

In contrast, controlled motivation implies that employees are also extrinsically motivated, but that the source of their motivation is external. A form of motivation called *introjected*

regulation refers to a form of motivation when employee engagement is not internalized but driven by internal rewards and punishment such as feelings of guilt, fear or pride. On the other hand when employees' motivation is driven by external rewards and punishment such as receiving a bonus or dismissal this motivation refers to *external regulated* motivation (Deci & Ryan, 2000). Both autonomous and controlled motivation are claimed to energize and influence workers' behaviour. Nevertheless, studies suggest that autonomously motivated people experience more psychological wellness and perform better then controlled motivated people who tend to experience more pressure (Gagne & Deci, 2005). Autonomous motivation in particular is linked to psychological need fulfilment (Deci & Ryan, 2000).

The basic idea underlying self-determination theory is the assumption that employees are motivated when they feel that three basic psychological needs are satisfied: 1) the need for autonomy; 2) competence; and 3) relatedness or belongingness. The perceived *need for autonomy* in SDT refers to an internalized sense of choice: being able to self-organize one's behaviour (Gagné & Deci, 2005). This need involves the experience of psychological freedom and a sense of choice an individual has when carrying out their activities (Deci & Ryan, 2010; Van den Broeck et al., 2010). The perceived *need for competence* is defined as an individual's natural desire to feel skilled and concerns feelings of mastery. There is an inherent desire to explore and effectively deal with the environment and to engage in challenging tasks to test and extend one's skills (Deci & Ryan, 2010; Van den Broeck et al., 2010). Finally, the perceived *need for relatedness or belongingness* refers to being connected to and associated with other people. This need is satisfied when employees participate in community activities and feel that they matter and are meaningful to others.

When the work environment (job design, reward contingencies and managerial style) supports one or more of these basic needs, employees will integrate and internalize those external regulations and become more autonomously motivated (Deci & Ryan, 2015). When individuals become more autonomously motivated, they experience more psychological and physiological wellness and will perform at a higher level (Ryan & Deci, 2017).

Satisfying the need for autonomy. In terms of HRM practices that characterize NWW, perceived job or professional autonomy refers to the level of freedom of choice and discretion one perceives to have in one's job (cf. Parker, 2014). Workers with a strong disposition for autonomy may appreciate work practices which include high levels of accountability (cf. Van Yperen, Rietzschel, & De Jonge, 2014), because they can contribute to and influence decisions. The perception of having time-spatial flexibility – the freedom

to adapt working hours to one's personal needs, to work where and when one wishes – may allow employees to better deal with various challenges both at work and at home. Perceived access to digital information and ICT technology support is of major importance for knowledge sharing in organizations, and can give employees a feeling of being in control. However, the costs in terms of the energy and attention required to become more autonomous and accountable may outweigh the benefits of satisfying this need for autonomy. In addition, when the time-spatial flexibility provided in modern workplaces interferes with being able to integrate work and non-work, this might frustrate the need for autonomy and can lead to stress (Canibano, 2019; Peters & Blomme, 2019).

Satisfying the need for competence. When employees feel that they have self-control over their work and are involved in challenging tasks, they may assess their work climate in a productive way (Seibert et al., 2004). Access to digital information and the provision of support through ICT technology is of major importance for knowledge sharing in organizations, and can give employees a sense of being in control. Knowledge sharing can also enhance feelings of competence by enabling individuals to acquire knowledge and develop work-related skills. NWW represents a work environment and working conditions that offer optimal challenges and opportunities to satisfy the need for competence. Indeed, the need for competence is positively associated with the wish to engage in challenging tasks and to acquire new skills (Van den Broeck, et al., 2010). However, knowledge sharing may become challenging when employees are required to work remotely, and under some circumstances this can have negative effects on their sense of competence. For example, remote working may result in fewer relationships with colleagues and less chance for knowledge sharing, resulting in employees feeling less competent (Pyöriä, 2011).

Satisfying the need for belongingness. Since NWW are most commonly implemented as self-organised (team)work in which the responsibilities are delegated to the individual and the team, employees tend to be more involved in the decisions that affect them. In this regard, employees might feel that they have an impact on their work environment. This might appeal to their wish to be significant to others and to belong to a group that collaborates to achieve shared goals. However, working away from the office and working flexible hours might also cause workers to feel disconnected or isolated and distant from other colleagues, the social life of the organization, and management (cf. O'Neil, Hambley, & Chatellier, 2014; Kossek, Thomson, & Lautsch, 2015). In this context, we also need to consider workplace inclusion, which refers to one's need to belong to a team or organization. When employees are frustrated in their need for relatedness, exclusion can occur.

Despite the potentially negative effects that NWW may have for employees' needs satisfaction, we assume that the expectation of organizations who have embraced the HRM practices associated with NWW (i.e., access to knowledge, time and spatial flexibility and professional autonomy) is that employees will engage in more challenging work and experience greater needs satisfaction. Gagne and Deci (2005) hypothesized that employees' self-determination via psychological needs satisfaction is positively related to autonomous motivation, which improves work related attitudes and stimulates work outcomes such as knowledge sharing and workplace proactivity. As such, HRM practices characterizing NWW might encourage proactive and self-directed activities, as this kind of autonomous behaviour is intrinsically satisfying. To conclude, when employees experience HRM practices as empowering, they will experience higher levels of self-determination as a result of satisfying the three needs of autonomy, competence, and relatedness, and hence will enact more workplace proactivity. Therefore, we propose:

Proposition 1: Self-determination positively mediates the relationship between perceived HRM practices (time-spatial flexibility, professional autonomy and access to knowledge) and workplace proactivity

2.2.3 Adding leadership as an element in the HRM system

Within the context of NWW, managers have to rethink their current leadership style. The organization of leadership therefore needs to be studied and considered from different theoretical perspectives. This raises the question of how accountability, coordination and control can best be organized when employees are increasingly working flexibly, remotely, and in teams. In this subsection, appropriate leadership styles and approaches that can be considered to empower and motivate workers in the context of NWW are explored. A distinction can be made between vertical or hierarchical leadership styles. In vertical styles, leadership is appointed to the formal leader, and in more horizontal approaches, leadership is distributed and informally carried out by the team as a whole. Vertical leadership takes place through a process of influence from leader to employee, whereas horizontal leadership focuses on the informal process within a group of employees (Pearce & Sims, 2002). Of course, in particular contexts, both vertical and horizontal leadership can be present.

Transformational Leadership. Leadership is based on the notion that leaders and followers are engaged in an exchange relationship in which both the leader and the follower have something to offer (Yukl, 2010). Transformational leadership behaviour is usually conceptualized as a set of four categories of interrelated behaviours: idealized influence,

inspirational motivation, intellectual stimulation, and individual consideration (Bass, 1997). The first two categories refer to charismatic aspects of leadership, whereas the last two categories refer to the practice of inspiring followers to share and pursue a vision and motivating them to work in line with the goals of the team and the organization (Yukl, 2010). In contrast to transactional leadership, transformational leadership is based on leaders' positive expectations about their followers, believing that they can and will perform as well as possible. Transformational leaders also focus on - and care about - their followers and their personal needs and development. This leadership style is appropriate for leading (co-located or virtual) teams that have to deal with complex tasks that demand creativity and learning (e.g., Allen & Vakalahi, 2013; Levesque, Rousseau, & Ho, 2008; Purvanova & Bono, 2009). This type of leadership will probably be appropriate for knowledge workers, who increasingly work in NWW contexts. Since transformational leadership also implies that leaders need to facilitate followers to handle responsibilities, hence giving them professional autonomy and accountability, this kind of leadership is likely to be effective in NWW contexts.

The link between transformational leadership and need satisfaction has been empirically tested in studies conducted by Kovjanic, Schuh, Jonas, Quaquebeke and Van Dick (2012) and by Jensen and Bro (2018). Transformational leaders encourage employees to develop individual solutions to existing problems and consider followers' perspectives when making decisions. Moreover, they are not controlling and do not monitor employees' actions but rather guide them by establishing the broader goals and objectives. In this regard, transformational leadership behaviour might raise the level of employees' need for autonomy. By providing support, spending time with employees, and coaching - but also by developing employees' strengths - leaders can enhance the self-awareness of their employees and their perception of their own competence. Furthermore, employees may feel more supported in performing and mastering tasks. In addition, there is the potential for transformational leaders to compensate for challenges associated with NWW contexts, by building trust and helping employees to resolve conflicts with peers or clients. Through their stimulation and encouragement, transformational leaders express confidence that employees can achieve their goals, allowing them to fulfil their need for competence. Leaders can generate optimism and enthusiasm in their teams, create psychological identification with the project team, and provide social support (Ding, Zhang, Sheng, & Wang, 2017). These formally appointed leaders can encourage higher levels of collaboration and coordination among colleagues via performance management by linking this to designated outcomes. In this regard, transformational leadership behaviour can enhance the need for relatedness. In conclusion, when employees view their leader as transformational, they will experience higher levels of self-determination and hence will enact more workplace proactivity. We therefore make the following proposition:

Proposition 2: Self-determination positively mediates the relationship between perceived transformational leadership and workplace proactivity

Transactional leadership. In contrast to transformational leadership, which is based on mutual stimulation and elevation in line with their followers' need for self-determination, transactional leadership is based on a more instrumental exchange relationship (Bass, 1997). In a transactional relationship between leader and follower, there is an agreed transaction in which the leader makes clear to the employee what he or she can expect in return for good performance (Bass, 1999). Transactional leadership emphasizes the ability of leaders to influence the follower by setting the rules, monitoring results and providing rewards (contingent rewards). This style of leadership is suitable when the job requirements are clear, work is done at a distance, and little personal contact and interaction for coordination is needed (Howell, Neufeld, & Avolio, 2005). In addition to self-determination, researchers have demonstrated that (a large proportion of) employees also have a need for structure, reflecting a strong preference for and compliance to rules and obligations, and favourable attitudes towards close monitoring and supervision (Rietschel, Slijkhuis, & Van Yperen, 2014). Moreover, although scholars have argued that person-centred leadership is more appropriate than task-oriented leadership, particularly in virtual contexts, transactional leadership behaviour can help to get tasks and projects finished as a result of this close monitoring and organizing (Bell, McAlpine, & Hill, 2019). Hence, we can assume that transactional leadership behaviour can be useful in the context of NWW, since result-based working can help knowledge workers with a strong need for structure to motivate themselves in their work.

Recent research has shown that supervisors' use of controlled work motivation positively relates to employees' perceptions of transactional leadership (Kanat-Maymon, Elimelech, & Roth, 2020). Transactional leadership has also been shown to be negatively associated with basic needs satisfaction (e.g., Hetland et al., 2015). As such, transactional leadership may undermine employees' autonomy and experience of competence and control, a notion supported by the finding that monitoring seems to be necessary in order to achieve performance (Hetland et al., 2015). Moreover, task-oriented leadership - in contrast to the relationship-oriented transformational leadership - could inhibit the need for relatedness, as avoiding errors and mistakes and following the rules is characteristic of this kind of transactional leadership (Bass, 1997). To conclude, when employees view their leader as a transactional leader, they will experience higher levels of structure and hence will enact more workplace proactivity. Therefore, we propose:

Proposition 3: Satisfaction of the need for structure positively mediates the relationship between perceived transactional leadership and workplace proactivity

Empowering leadership. In some circumstances, transformational leadership may not be the best way to manage workers in NWW contexts and empowering leadership may be more appropriate. Employees may face challenges related to dispersed collaboration over time and space, as a result of using technology-enhanced communication. Single formally appointed leaders might run into difficulties when trying to effectively lead this kind of team. As a result, leaders and supervisors have to delegate responsibilities to individual employees (Bell, McAlpine, & Hill, 2019). Empowering leadership is a distinctive leadership style in which leaders share power with their employees by providing them with additional responsibility and decision-making authority over work and resources, as well as the emotional support needed to handle this additional responsibility (Ahearne, Mathieu, & Rapp, 2005). An empowering leader encourages their employees to take on more responsibilities, shares power, heightens a sense of purpose for an employee's work, expresses enthusiasm for employee performance, and encourages participation in decision making (Ahearne et al., 2005; Sharma & Kirkman, 2015).

Although empirical studies have shown high correlations between empowering leadership and transformational leadership (e.g., Amundsen & Martinsen, 2014a; Cheong, Yammarino, Dionne, Spain, & Tsai, 2019), there are important differences. In particular, the delegation of responsibility and authority to the lowest organizational level, and the involvement of followers in decision making, distinguishes empowering from transformational leadership (Martin, Liao, & Campbell, 2013). Through their instructions and actions, empowering leaders formally delegate significant freedom and autonomy to their employees (Zhang & Zhou, 2014). The development of employees' self-management or self-leadership skills has become increasingly important in modern organizations (Pearce & Sims, 2002). Coaching and sharing information is important for fostering trust among co-workers and helps to build positive relationships. This is especially important in NWW contexts where employees are frequently working remotely. In addition, empowering leadership contributes to fostering effective collaboration between and performance of geographically dispersed virtual teams (Hill & Bartol, 2016).

As empowering leaders develop positive relationships with their employees, this can help to meet employees' need for relatedness (Deci, Olafson, & Ryan, 2017). When empowering leaders delegate responsibility and authority to the lowest organizational level, and provide their employees with sufficient resources to deal with this, this enhances employees' feelings of autonomy, self-efficacy and control over their own work (Cheong, Spain, Yammarino, & Yun, 2016; Zhang & Bartol, 2010). This ability to empower employees can contribute to the fulfilment of employees' need for autonomy and for competence. Research conducted by Hon and Chan (2013) has demonstrated that empowering leaders who supported relatedness fostered more autonomous motivation among followers,

resulting in more creativity in their work. However, when managers were more coercive, followers were less motivated and creative. Whereas unregulated empowering leadership behaviour can provoke an over-estimation of employees - and the subsequent errors and mistakes this entails (Cheong et al., 2016; Lorinkova, Pearsall, & Sims, 2013) - empowering leaders can cultivate feelings of work-related autonomy, competency and connectedness among their followers. As such, when employees view their leader as empowering, they will experience higher levels of self-determination and hence will enact more workplace proactivity. Therefore, we propose:

Proposition 4: Self-determination positively mediates the relationship between perceived empowering leadership and workplace proactivity

Shared Leadership. In addition to transformational, transactional, and empowering leadership, NWW also calls for more horizontal leadership approaches such as shared leadership. Indeed, in flatter organizations with fewer layers and a greater reliance on teamwork, leadership needs to be shared and exercised by several team members. Whilst empowering leadership is a specific set of leader behaviours focused on sharing power, shared leadership refers to team members who share responsibility for leadership (Cheong et al., 2019). Shared leadership implies that responsibility for the leadership behaviours discussed above are shared among the members of a group (Carson, Tesluk, & Marrone, 2007; Pearce, 2004). Horizontal leadership approaches, enabled by higher levels of job autonomy (Fausing, Jeppesen, Jønsson, Lewandowski, & Bligh, 2013), offer more flexibility and optimal use of the capacities and expertise of individual employees in complex and team-based work environments, such as NWW contexts (Muethel & Hoegl, 2013). Due to geographical dispersion and the lack of face-to-face contact, knowledge teams are becoming increasingly 'virtual' and focused on results (Hoch & Kozlowski, 2014).
Houghton, Pearce, Manz, Courtright, and Stewart (2015) suggest that shared leadership provides team members with an increased sense of meaning, social support and belonging in the work context. It has therefore been argued that the success of shared leadership is related to team autonomy. Team-members are given the freedom to 'lead each other,' in order to solve their tasks and to plan activities autonomously within the team (Fausing, et al., 2013), thus meeting employees' need for autonomy. Sharing leadership responsibilities can enhance feelings of competence because assuming a leadership role in the team offers employees flexibility, more optimal use of the capacities and expertise, and more opportunities to engage in challenging tasks (Houghton, et al., 2015). For employees who feel that they are closely affiliated with their team members and can share their joys and problems, this might therefore help to satisfy the need for relatedness. Moreover, shared leadership can prevent employees from feeling disconnected or isolated and distant from their peers, and therefore empower them to build and develop social ties in the workplace with colleagues.

We may assume that shared leadership corresponds with significantly higher levels of perceived autonomy for the individual team members, and the acquisition of a broader range of skills for managing their own and the team's work. This suggests that their need for competence and relatedness is being fulfilled. To conclude, when employees experience shared leadership, they experience higher levels of self-determination and hence will enact more workplace proactivity. Therefore, we posit:

Proposition 5: Self-determination positively mediates the relationship between perceived shared leadership and workplace proactivity

Vertical and horizontal leadership. Horizontal approaches of leadership such as shared leadership do not eliminate the role of the vertical or hierarchical leader, and vice versa. Knowledge workers in contemporary organizations are concurrently members of multiple teams, either on a temporary or a permanent basis. Instead of directing and controlling these employees, a hierarchical leader has a role in stimulating informal collaboration between colleagues (employees). He or she can do this by coaching and motivating individuals to share leadership responsibilities, and by inspiring employees to achieve the general aims of the organization and the specific objectives of the different teams and projects of which they are a part. These hierarchical leaders can encourage their employees to attain higher levels of collaboration and coordination among colleagues (Bass, Avolio, Jung, & Berson, 2003). We concur with Pearce (2004), who suggests that the hierarchical (team) leader has to take up a new role in fostering shared leadership activities and stimulating the distribution of leadership among colleagues.

Although conceptually different, we argue that hierarchical leadership and horizontal, shared leadership are interrelated. In line with Bass (1985), we posit that hierarchical leadership (for example transformational leadership) encourages followers to perform above expectations and inspires followers to perform better for the sake of the organization (e.g., Fausing, Joensson, Lewandowski, & Bligh, 2015). In modern work organizations, transformational leadership has become increasingly important, since employees often work in multiple teams that may be geographically dispersed and have to communicate by means of modern technology (Allen & Vakalahi, 2013). However, a formal leader often does not have the substantive expertise needed to handle complex issues that require an innovative solution. They are forced to empower their employees and to facilitate and encourage collaboration between a range of professionals in new team combinations. Hierarchical leadership will be needed in future organizations to organize boundary-spanning activities intended to develop a common ground between organizations and their individual (team) workers and to generate trust among employees. Therefore, we propose:

Proposition 6: Vertical hierarchical leadership will be positively associated with horizontal shared leadership

To summarize, Figure 2.1 depicts the influence of HRM practices and leadership approaches on work behaviours, and how these effects may be mediated by self-determination/psychological empowerment.

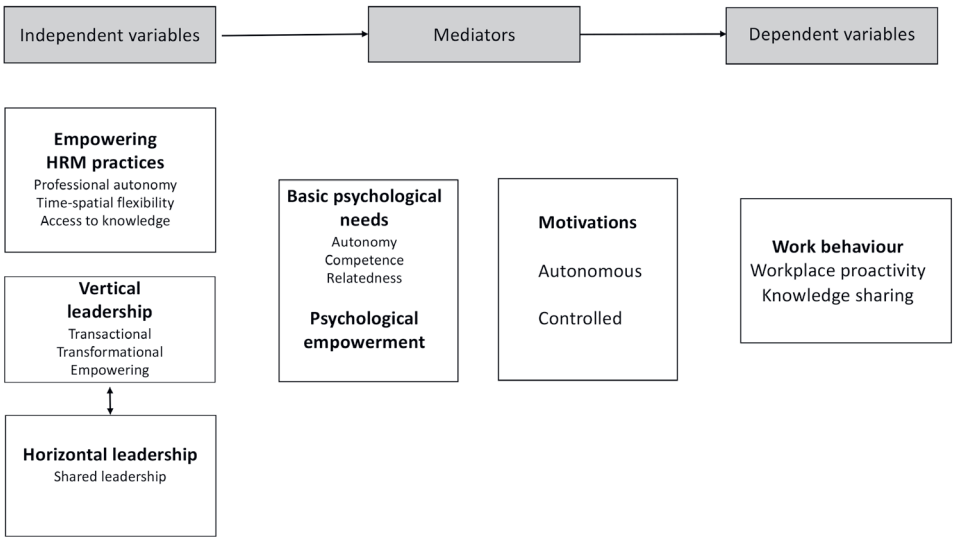


Figure 2.1 The influence of HRM practices and leadership approaches on work behaviours, and how these effects may be mediated by self-determination or psychological empowerment.

2.3 Discussion and theoretical contributions

This conceptual study contributes to the New Ways of Working literature by offering a deeper understanding of how HRM practices and leadership can foster employees' workplace proactivity.

Firstly, we conceptualized NWW contexts as organizations that have adopted innovative HRM practices in their work design in order to empower their workers. Practices that particularly characterize these contexts are time-spatial flexibility, professional autonomy, and access to knowledge. We argued that these elements constitute innovative HRM practices that are linked to the employee centred workforce philosophy mentioned in the professional management literature (Bijl, 2009). We concluded that these practices are

important conditions that can shape effective HRM systems, and which have the potential to motivate employees, therefore stimulating workplace proactivity, and resulting in higher levels of creativity, learning and innovation.

Secondly, we presented self-determination theory as a useful lens through which to focus on the importance of employees' basic needs fulfilment (the need for autonomy, competence, relatedness). SDT helped us to understand how HRM practices in the context of NWW can enhance employees' autonomous motivation and wellbeing. HRM practices - such as time and spatial flexibility, professional autonomy, and access to information - can enthuse, inspire and motivate employees in their work, especially as these practices have the potential to fulfil employees' basic psychological needs. The SDT framework presents the underlying mechanisms linking HRM practices in NWW contexts to employees' workplace proactivity.

Thirdly, in line with Leroy et al. (2018), we argued that leadership is a neglected aspect of the HRM system. Considering leadership as a management practice within NWW contexts can provide powerful connections between the HRM and the leadership literature, and can help us to identify which kind of leadership is appropriate when managing work relationships in NWW contexts. We therefore explored several leadership styles and approaches which can be considered to be promising within the context of NWW and can be linked to followers' motivation. We examined the potential roles of transformational, transactional, and empowering leadership styles, as well as shared leadership, all of which can be useful in NWW contexts, all of which meet the specific requirements in NWW work contexts. In addition, we explored the links between hierarchical, vertical and horizontal leadership styles.

Fourth, we set out a number of propositions that can provide a starting point for researchers and practitioners to examine how HRM practices and leadership styles in NWW contexts can foster workplace proactivity via self-determination. Based on the four leadership approaches discussed, we provided a more nuanced view about the appropriateness of leadership behaviour and approaches in NWW by linking them to the fulfilment of specific basic psychological needs, including the need for structure (Rietschel et al., 2014). More specifically, we suggested that transformational leadership behaviours could fulfil employees' needs for autonomy, competence and relatedness. However, we argued that transactional aspects of leadership can also play a role in structuring projects via monitoring and organization, as these behaviours can satisfy the need for structure for employees in NWW contexts, and hence can guide and motivate employees in their work. By encouraging employees to decide how to handle problems and challenges at work - both individually and together with their teammates - empowering leaders can appeal to employees' self-determination and their feeling to make an impact (Spreitzer,

1995). Leaders may provide employees with constructive feedback and coaching which can enhance feelings of competence. Additionally, sharing leadership with colleagues can ensure autonomous motivation, and can lead to greater fulfilment of the need for autonomy, competence, and belongingness.

2.4 Avenues for future research

This conceptual paper presented five propositions concerning the role of HRM practices and different leadership approaches in the fulfilment of workers' basic psychological needs within the context of NWW. This study suggests a number of avenues for further research.

Our first suggestion for further research on the effectiveness of HRM practices and leadership styles in NWW contexts would be to study how specific aspects of HRM practices and leadership styles best work together. Our conceptual framework could then be used to conduct further empirical research to test the propositions outlined earlier. In this study, the focus was on workplace proactivity, as organizations are becoming more dependent on the proactivity of knowledge workers from multiple disciplines to achieve their organizational goals (Parker & Bindl., 2016). It would certainly also be worthwhile to investigate other outcomes that may demand autonomous motivation from employees, such as knowledge sharing and innovative work behaviour (Bruyne, & Gerritse, 2018).

Second, the conceptual model resulting from this study connects the leadership and the HRM literature. This model can be used to investigate how HRM practices and leadership styles can both contribute to employee performance. As such, we encourage future research to investigate the extent to which HRM and leadership are independent, additional factors or rather complementary as the combination of particular HRM practices and leadership brings additional advantages in the context of NWW . In addition, one might investigate other configurations of (and interactions between) various HRM practices and leadership approaches, and what influence these have on the motivation of employees to engage in work outcomes such as proactivity, knowledge-sharing and innovative behaviour.

Finally, it is worth noting that in the context of blended working, Van Yperen et al. (2014) add a personal need for structure as a fourth need alongside the three classical personal needs distinguished in SDT. Workers with a low need for a structured environment may perceive NWW as a satisfactory and productive way of working. Particularly in contexts where employees are not used to working virtually but are forced to do so, such as during the COVID-19 pandemic, this could be a viable avenue for further research.

2.5 Management implications

This study has important implications for Human Resource Management and leadership practice.

First, the concept of NWW assumes that managers encourage and support individual work preferences in order to engage and motivate their employees. However, managers have to recognize that simply implementing HRM practices with a "one size fits all" approach may neglect the preferences and needs between and among individuals and groups of employees. HRM departments and HR officers can therefore play a clear role in shaping employment and working practices for employees so that they better reflect their personal needs and goals (Hornung, Rousseau, Weigl, Müller, & Glaser, 2014). Special attention should also be paid to the younger generation of workers who are familiar with technology and virtual environments but need guidance in how to work effectively in team-based environments and to gain trust in their work context (Germain & McGuire, 2014).

Second, the impact of NWW on employee motivation depends on the combination of the HRM practices involved. For knowledge workers, a progressive work environment allows greater autonomy and a better work-life balance. As location-based work (carried out from a specific office, for instance) and time-based work (working from 9 a.m. to 5 p.m., for instance) become less commonplace, organizations will need to develop new HRM and contractual practices to manage performance, address issues of trust and transparency, and invest in updating the skills of a largely virtual workforce.

Third, the adoption of NWW as an innovative HRM system is likely to change the role of managers and their leadership approaches in today's knowledge-based economy. Control in the traditional sense of the word is less appropriate for employees and does not fit with the notion of providing employees with more autonomy in a time- and place-independent way. Consequently, employees are more reliant on self-management but also need leadership support. Formal leadership is still needed to empower employees. These kind of leaders have a role in sharing and delegating power, information and resources with those employees who are lacking in these things. They need to be able to generate optimism and enthusiasm in their teams and create psychological identification with the project team. Moreover, leaders must find ways to create a long-term vision and to organize boundary-spanning activities intended to develop common ground between organizations and individual (team) workers, and generate trust among employees. A better understanding of how people can be motivated through the use of appropriate leadership styles may help Human Resource Management to explore and re-think their own contributions.

References

Ahearne, M., Mathieu, J., & Rapp, A. (2005). To empower or not to empower your sales force? An empirical examination of the influence of leadership empowerment behaviour on customer satisfaction and performance. *Journal of Applied Psychology*, *90*(5), 945-955.

Allen, S. A., & Ofahengaue Vakalahi, H. F. (2013). My team members are everywhere! A critical analysis of the emerging literature on dispersed teams. *Administration in Social Work*, *37*(5), 486-493.

Amundsen, S., & Martinsen, Ø. L. (2014). Empowering leadership: Construct clarification, conceptualization, and validation of a new scale. *The Leadership Quarterly, 25*(3), 487-511.

Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. (2000). Manufacturing competitive advantage: *The effects of high performance work systems on plant performance and company outcomes*. Ithaca, NY: Cornell University Press.

Arefin, M. S., Arif, I., & Raquib, M. (2015). High-performance work systems and proactive behavior: The mediating role of psychological empowerment. *International Journal of Business and Management*, 10(3), 132-140.

Baane, R., Houtkamp, P., & Knotter, M. (2010). *The new world of work unraveled. (In Dutch: Het nieuwe werken ontrafeld*). Assen: Uitgeverij Van Gorcum.

Baane, R. (2010). The new world of work unraveled: Bricks, bytes & Behaviour. (In Dutch: Het Nieuwe Werken ontrafeld. Over Bricks, Bytes & Behavior). *Tijdschrift voor HRM*, *141*(1), 7-23.

Baruch, Y. (2000). Teleworking: benefits and pitfalls as perceived by professionals and managers. *New Technology, Work and Employment*, *15*(1), 34-49.

Bass, B. M. (1997). Does the transactional–transformational leadership paradigm transcend organizational and national boundaries? *American Psychologist*, *52*(2), 130-139.

Bass, B. M. (1999). Two decades of research and development in transformational leadership. *European Journal of Work and Organizational Psychology*, *8*(1), 9-32.

Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, *88*(2), 207-218.

Batistič, S., Černe, M., Kaše, R., & Zupic, I. (2016). The role of organizational context in fostering employee proactive behaviour: The interplay between HR system configurations and relational climates. *European Management Journal*, *34*(5), 579-588.

Bell, B., McAlpine, K., & Hill, N. (2019). Leading from a Distance: Advancements in Virtual Leadership Research. In R. Landers (Ed.), *The Cambridge Handbook of Technology and Employee Behaviour* (pp. 387-418). Cambridge: Cambridge University Press. https://doi:10.1017/9781108649636.016

Bijl, D. (2009). *Starting with New Ways of Working. (In Dutch: Aan de slag met Het Nieuwe Werken)*. Zeewolde: Par CC.

Boselie, P., Dietz, G., & Boon, C. (2005). Commonalities and contradictions in HRM and performance research. *Human Resource Management Journal*, *15*(3), 67-94.

Bowen, D. E., & Ostroff, C. (2004). Understanding HRM–firm performance linkages: The role of the "strength" of the HRM system. *Academy of Management Review*, *29*(2), 203-221.

Boxall, P., & Macky, K. (2009). Research and theory on high-performance work systems: progressing the high-involvement stream. *Human Resource Management Journal*, *19*(1), 3-23.

Bruyne, E. D., & Gerritse, D. (2018). Exploring the future workplace: results of the futures forum study. *Journal of Corporate Real Estate*, *20*(3), 196–213.

Cañibano, A. (2019). Workplace flexibility as a paradoxical phenomenon: Exploring employee experiences. *Human Relations*, *72*(2), 444-470.

Carson, J. B., Tesluk, P. E., & Marrone, J. A. (2007). Shared leadership in teams: An investigation of antecedent conditions and performance. *Academy of Management Journal*, *50*(5), 1217-1234.

Chen, M., Lyu, Y., Li, Y., Zhou, X., & Li, W. (2017). The impact of high-commitment HR practices on hotel employees' proactive customer service performance. *Cornell Hospitality Quarterly*, *58*(1), 94-107.

Child, J. (2015). *Organization: contemporary principles and practice*. Sussex: John Wiley & Sons.

Cheong, M., Spain, S. M., Yammarino, F. J., & Yun, S. (2016). Two faces of empowering leadership: Enabling and burdening. *The Leadership Quarterly*, *27*(4), 602–616.

Cheong, M., Yammarino, F. J., Dionne, S. D., Spain, S. M., & Tsai, C. Y. (2019). A review of the effectiveness of empowering leadership. *The Leadership Quarterly*, *30*(1), 34-58.

Deci, E. L., & Ryan, R. M. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, *25(*1), 54-67.

Deci, E.L., & Ryan, R.M. (2015). Self-Determination Theory. In Wright, J.D. (Ed.), *International Encyclopedia of the Social & Behavioural Sciences* (Second Edition, pp. 486-491). Amsterdam: Elsevier.

Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-determination theory in work organizations: The state of a science. *Annual Review of Organizational Psychology and Organizational Behavior*, *4*, 19-43.

Demerouti, E., Derks, D., Ten Brummelhuis, L. L., & Bakker, A. B. (2014). New Ways of Working: Impact on Working Conditions, Work–Family Balance, and Well-Being. In C. Korunka & P. Hoonakker (Eds.), *The Impact of ICT on Quality of Working Life* (pp. 123-141). Dordrecht, Netherlands: Springer

Den Hartog, D. N., & Belschak, F. D. (2012). When does transformational leadership enhance employee proactive behavior? The role of autonomy and role breadth self-efficacy. *Journal of Applied Psychology, 97*(1), 194.

Fausing, M. S., Jeppe Jeppesen, H., Jønsson, T. S., Lewandowski, J., & Bligh, M. C. (2013). Moderators of shared leadership: work function and team autonomy. *Team Performance Management: An International Journal*, *19*(5/6), 244-262.

Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, *26*(4), 331-362.

Gerdenitsch, C., Kubicek, B., & Korunka, C. (2015). Control in Flexible Working Arrangements. *Journal of Personnel Psychology*, *14*(2), 61-69.

Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, *16(*2), 250-279.

Handy, C. (1995). Trust and the virtual organization. *Harvard Business Review*, *73*(3), 40–50.

Hetland, J., Hetland, H., Bakker, A. B., Demerouti, E., Andreassen, C. S., & Pallesen, S. (2015). Psychological need fulfillment as a mediator of the relationship between transformational leadership and positive job attitudes. *Career Development International*, *20*(5), 464-481.

Henttonen, K., & Blomqvist, K. (2005). Managing distance in a global virtual team: the evolution of trust through technology-mediated relational communication. *Strategic Change*, *14*(2), 107-119.

Hill, J. E., Grzywacz, J. G., Allen, S., Blanchard, V. L., Matz-Costa, C., Shulkin, S., & Pitt-Catsouphes, M. (2008). *Defining and conceptualizing workplace flexibility. Community, Work and Family*, *11*(2), 149-163.

Hill, N. S., & Bartol, K. M. (2016). Empowering leadership and effective collaboration in geographically dispersed teams. *Personnel Psychology*, *69*(1), 159-198.

Hoch, J. E., & Kozlowski, S. W. (2014). Leading virtual teams: Hierarchical leadership, structural supports, and shared team leadership. *Journal of Applied Psychology*, *99*(3), 390-403.

Hon, A. H., & Chan, W. W. (2013). Team creative performance: The roles of empowering leadership, creative-related motivation, and task interdependence. *Cornell Hospitality Quarterly*, *54*(2), 199-210.

Hornung, S., Rousseau, D. M., Weigl, M., Müller, A., & Glaser, J. (2014). Redesigning work through idiosyncratic deals. *European Journal of Work and Organizational Psychology*, *23*(4), 608-626.

Houghton, J. D., Pearce, C. L., Manz, C. C., Courtright, S., & Stewart, G. L. (2015). Sharing is caring: Toward a model of proactive caring through shared leadership. *Human Resource Management Review*, *25,* 313-327.

Howell, J.M., Neufeld, D.J. & Avolio, B.J. (2005). Examining the relationship of leadership and physical distance with business unit performance. *The Leadership Quarterly*, *16*(2), 273-285.

Jensen, U. T., & Bro, L. L. (2018). How transformational leadership supports intrinsic motivation and public service motivation: The mediating role of basic need satisfaction. *The American Review of Public Administration*, *48*(6), 535-549.

Kaarsemaker, E. C., & Poutsma, E. (2006). The fit of employee ownership with other human resource management practices: Theoretical and empirical suggestions regarding the existence of an ownership high-performance work system. *Economic and Industrial Democracy*, *27*(4), 669-685.

Kanat-Maymon, Y., Elimelech, M., & Roth, G. (2020). Work motivations as antecedents and outcomes of leadership: Integrating self-determination theory and the full range leadership theory. *European Management Journal.* https://doi.org/10.1016/j.emj.2020.01.00

Kehoe, R.R., & Wright, P.M. (2013). The impact of high performance human resource practices on employees' attitudes and behaviors. *Journal of Management*, *19,* 419-431.

Kelliher, C., & De Menezes, L. M. (2019). *Flexible Working in Organisations: A Research Overview*. Oxon: Routledge.

Kingma, S. (2019). New ways of working (NWW): work space and cultural change in virtualizing organizations. *Culture and Organization*, *25*(5), 383-406.

Kossek, E. E., Thompson, R. J., & Lautsch, B. A. (2015). Balanced Workplace Flexibility. *California Management Review*, *57*(4), 5-25.

Kovjanic, S., Schuh, S. C., Jonas, K., Quaquebeke, N. V., & Dick, R. (2012). How do transformational leaders foster positive employee outcomes? A self-determination-based analysis of employees' needs as mediating links. *Journal of Organizational Behavior, 33*(8), 1031-1052.

Krausert, A. (2014). HRM systems for knowledge workers: Differences among top managers, middle managers, and professional employees. *Human Resource Management*, *53*(1), 67-87.

Lorinkova, N. M., Pearsall, M. J., & Sims Jr, H. P. (2013). Examining the differential longitudinal performance of directive versus empowering leadership in teams. *Academy of Management Journal*, *56*(2), 573-596.

Leroy, H., Segers, J., Van Dierendonck, D., & Den Hartog, D. (2018). Managing people in organizations: Integrating the study of HRM and leadership. *Human Resource Management Review, 28*(3), 249-257.

Levesque, L. L., Rousseau, D. M., & Ho, V. T. (2008). Creative Collaboration at Lintell Scientific. *The CASE Journal, 5*(1), 91-100.

Liu, Y., & De Frank, R. S. (2013). Self-interest and knowledge-sharing intentions: the impacts of transformational leadership climate and HR practices. *The International Journal of Human Resource Management*, *24*(6), 1151-1164.

Martin, S. L., Liao, H., & Campbell, E. M. (2013). Directive versus empowering leadership: A field experiment comparing impacts on task proficiency and proactivity. *Academy of Management Journal*, *56*(5), 1372-1395.

McDermott, A. M., Conway, E., Rousseau, D. M., & Flood, P. C. (2013). Promoting effective psychological contracts through leadership: The missing link between HR strategy and performance. *Human Resource Management*, *52*(2), 289-310.

Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, *91*(6), 1321-1339.

Muethel, M., & Hoegl, M. (2013). Shared leadership effectiveness in independent professional teams. *European Management Journal*, *31*(4), 423-432.

Nishii, L. H., & Wright, P. M. (2008).Variability within organizations: Implications for strategic human resources management. In D. B. Smith (Ed.), *The people make the place: Dynamic linkages between individuals and organizations* (pp. 225-248). Mahwah, NJ: Erlbaum

O'Neill, T.A., Hambley, L.A. & Chatellier, G.S. (2014). Cyberslacking, engagement, and personality in distributed work environments. *Computers in Human Behavior*, *40*, 152-160.

Parker, S. K. (2014). Beyond motivation: Job and work design for development, health, ambidexterity, and more. *Annual Review of Psychology*, *65*, 661-691.

Parker, S. K., & Bindl, U. K. (Eds.). (2016). *Proactivity at work: Making things happen in organizations*. New York: Taylor & Francis.

Parker, S. K., Williams, H. M., & Turner, N. (2006). Modelling the antecedents of proactive behavior at work. *Journal of Applied Psychology*, *91*, 636–652.

Paauwe, J. (2009). HRM and performance: Achievements, methodological issues and prospects. *Journal of Management Studies*, *46*(1), 129-142.

Pearce, C. L., & Sims Jr, H. P. (2002). Vertical versus shared leadership as predictors of the effectiveness of change management teams: An examination of aversive, directive, transactional, transformational, and empowering leader behaviors. *Group dynamics: Theory, Research, and Practice*, *6*(2), 172-197.

Pearce, C. L. (2004). The future of leadership: Combining vertical and shared leadership to transform knowledge work. *Academy of Management Perspectives*, *18*(1), 47-57.

Peters, P., Kraan, K. & Van Echtelt, P. (2013). Flourish under conditions of New ways of working: less burnout, more dedication. (in Dutch: Floreren onder condities van Het Nieuwe Werken: minder burnout, meer toewijding). *Tijdschrift voor Arbeidsvraagstukken*, *29*, 304-321.

Peters, P., Poutsma E., Van der Heijden B., Bakker A.P. & De Bruijn, A. (2014). Enjoying new ways to work: An HRM-process approach to study flow. *Human Resource Management, 53*(2), 271–290.

Peters, P., & Blomme, R. J. (2019). Forget about 'the ideal worker': A theoretical contribution to the debate on flexible workplace designs, work/life conflict, and opportunities for gender equality. *Business Horizons*, *62*(5), 603-613.

Purvanova, R. K., & Bono, J. E. (2009). Transformational leadership in context: Face-to-face and virtual teams. *The Leadership Quarterly*, *20*(3), 343-357.

Pyöriä, P. (2011). Managing telework: risks, fears and rules. *Management Research Review*, *34*(4), 386-399.

Ryan, R. M., & Deci, E. L. (2019). Research on intrinsic and extrinsic motivation is alive, well, and reshaping 21st-century management approaches: Brief reply to Locke and Schattke. *Motivation Science*, *5*(4), 291–294.

Seibert, S. E., Silver, S. R., & Randolph, W. A. (2004). Taking empowerment to the next level: A multiple-level model of empowerment, performance, and satisfaction. *Academy of Management Journal*, *47*(3), 332-349.

Sharma, P. N., & Kirkman, B. L. (2015). Leveraging leaders: A literature review and future lines of inquiry for empowering leadership research. *Group & Organization Management*, *40*(2), 193-237.

Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, *38*(5), 1442-1465.

Ulrich, D., & Dulebohn, J. H. (2015). Are we there yet? What's next for HR*?. Human Resource Management Review*, *25*(2), 188-204.

Van den Broeck, A., Vansteenkiste, M., Lens, W., & De Witte, H. (2010). Unemployed Individuals' Work Values and Job Flexibility: An Explanation from Expectancy-Value Theory and Self-Determination Theory. *Applied Psychology*, *59*(2), 296-317.

Van der Heijden, B. I. J. M., Peters, P., & Kelliher, C. (2014). New ways of working and employability. Towards an agenda for HRD. In R.F. Poell, T.S. Rocco, & G.L. Roth (Eds.). *The Routledge Companion to Human Resource Development* (pp. 542-551). London, UK: Routledge.

Van Yperen N.W., Rietzschel E.F., & De Jonge K.M.M. (2014) Blended working: For whom it may (not) work. *PLoS ONE*, *9(*7): e102921.

Wright, P. M., Gardner, T., Moynihan, L., & Allen, M. (2005). The HR performance relationship: Examining causal direction. *Personnel Psychology*, *58*(2), 409-446.

Yukl, G. (2010). *Leadership in Organizations* (6th ed.) Englewood Cliffs, NJ: Prentice Hal.

Zhang, X., & Zhou, J. (2014). Empowering leadership, uncertainty avoidance, trust, and employee creativity: Interaction effects and a mediating mechanism. *Organizational Behavior and Human Decision Processes*, *124*(2), 150-164.

CHAPTER 3

Shared leadership and workplace proactivity in NWW contexts

This chapter is published as Coun, M.J.H., Gelderman, C. J., & Pérez-Arendsen, J. (2015). *Shared leadership and workplace proactivity in New Ways of Working* (In Dutch: Gedeeld leiderschap en proactiviteit in Het Nieuwe Werken). *Gedrag & Organisatie*, *28*(4), 356-379.

Summary

Within the context of NWW, employees have greater flexibility and autonomy, and the opportunity to organize their work in a more independent manner. It can therefore be expected that teams – as well as individual employees - operating in NWW contexts will be more inclined to display workplace proactivity. As employees increasingly work in teams in which responsibility is shared, the notion of shared leadership is becoming more relevant to modern day organizations. The present study examines the extent to which shared leadership is an important leadership approach within NWW, and the relationship between the adoption of NWW and the workplace proactivity of the individual employee and of the team members. A quasi-experimental research design was set up in which NWW employees were compared with employees who had not (yet) adopted NWW. Survey data were collected from two groups of employees working in a large banking and insurance company in the Netherlands. In contrast to expectations, working according to NWW principles was not associated with an increase in shared leadership. In contrast to expectations, no significant relationship was found between employees who already had access to NWW and shared leadership However, albeit with some caution, work principles which are associated with 'human factors and attitudes', such as 'giving and receiving honest feedback', 'greater freedom and responsibility', and 'greater internal ownership and entrepreneurial spirit', are of importance for organizations which promote shared leadership and encourage workplace proactivity. The results showed that working in an NWW context was positively associated with team workplace proactivity although there was only a indirect relationship with individual workplace proactivity of employees. Merely implementing NWW does not result in shared leadership, although working in teams is a logical consequence of the opportunities offered by NWW.

3.1 Introduction

The fourth Dutch National Survey on New Ways of Working (NWW) (2014) showed that more and more people consider NWW to be 'a standard way of working'. Supported by modern information and communication technologies, employees are increasingly able to determine not only where to work, but also when and how they are going to do it. This flexible style of working has become more and more common, as illustrated by Cisco's Connected World Technology Report (2014). This multinational technology company conducts annual research on the impact of technology on peoples' professional lives.

A considerable number of studies have focused on the implementation of NWW (Baane, Houtkamp, & Knotter, 2011) and the various effects of NWW, for example on engagement and commitment (Ten Brummelhuis, Bakker, Hetland, & Keulemans, 2012), work satisfaction (Gajendran & Harrison, 2007), innovative behaviour (De Spiegelaere, Van Gyes, Benders, & Van Hootegem, 2013a), work-life balance (Demerouti, Derks, Ten Brummelhuis, & Bakker, 2014), and job satisfaction (Peters, Poutsma, Van der Heijden, Bakker, & De Bruijn, 2014). More generally, the effects of NWW on 'organizational benefits' (Blok, Groenesteijn, Schelvis, & Vink, 2012; Martínez Sánchez, Pérez Pérez, De Luis Carnicer, & Vela Jiménez, 2007) have also been explored. Other studies (O'Neill, Hambley, & Chatellier, 2014; Van Breukelen, Makkenze, & Waterreus, 2014) have tried to define particular NWW profiles to help determine which employees are most likely to benefit from working in a flexible manner according to the principles of NWW.

One of NWW's pioneers, Bijl (2009), designed a checklist so that organizations can assess how far the implementation of NWW has progressed. Still, despite the popularity of NWW, only very few academic studies have investigated the effects of NWW on employee behaviour (De Spiegelaere et al., 2013a; Peters et al., 2014). Van Breukelen et al. (2014) observed that reports in academic and professional journals tend to be based on anecdotal evidence or the experiences of consultants who have been involved in the implementation of NWW (cf. De Groot & De Rouw, 2011; De Pous, & Van der Wielen, 2010).

According to Baane (2010), one of the distinguishing characteristics of NWW is the focus on work outcomes rather than the number of hours worked. This has important consequences for the role of the manager: traditional ways of managing through active steering and control are no longer appropriate when employees work in more time- and location-independent ways. Leadership styles that are focused on coaching and guidance are better suited to dealing with employees who operate in teams and who are given much greater autonomy in deciding how, where, and when they do their work. Studies conducted by Pearce (2004), Pearce, Hoch, Jeppesen, and Wegge (2010), and Konradt

(2014) have demonstrated that during the transition towards more team-oriented knowledge work, compared to hierarchical and vertical leadership approaches, shared leadership tends to be more effective. Shared leadership refers to a style of leadership in which the leadership role is adopted by a number of team members together, rather than exclusively by the single person or leader who is formally authorized for that role. Shared leadership, a horizontal leadership approach, is a steering mechanism that fits with the characteristics of NWW. However, the relationship between shared leadership and NWW remains under investigated.

When direct control is reduced and teams are required to organize and manage themselves, organizations have to rely to a greater extent on the personal initiative of their employees with respect to identifying and solving problems. In fact, the decentralization of power means that workplace proactivity and taking the initiative are likely to be important factors in determining organizational success (Crant, 2000; Williams, Parker, & Turner, 2010). The transition to NWW could thus enhance the workplace proactivity of teams as well as individual employees. However, this relationship has not yet been investigated.

Most academic studies on NWW are based on cross-sectional data, which makes it difficult to establish causal relationships (Blok et al., 2012; De Spiegelaere et al., 2013a; Ten Brummelhuis et al., 2012). Moreover, it is difficult to design a study in which the effects of NWW can be measured in any reliable manner. There will always be large differences - not only between organizations but also within organizations. As organizations develop and change, distinguishing between the effects of NWW and other potentially confounding factors becomes more and more challenging (Blok et al., 2012). The present study follows the research design recommendations formulated by Demerouti, Derks, Ten Brummelhuis, and Bakker (2014), who advocate the use of a strong research design in which NWW employees are compared with employees who have not (yet) adopted NWW. These two sets of employees should be performing similar kinds of tasks.

The main research question of the current study focuses on the extent to which NWW and shared leadership are related to workplace proactivity. What are the differences in terms of workplace proactivity and shared leadership between employees that have access to NWW practices and those who do not?

3.2 Theoretical background and hypotheses

3.2.1 Work principles of NWW

NWW is a concept that comprises a range of new styles of working and new management principles (Peters, De Bruijn, Bakker, & Van der Heijden, 2011), in which employees - within limits - have the freedom to determine 'how they work, where they work, and with whom they work' (Bijl, 2009, p. 27). Employee empowerment, self-management, and flexibility are all characteristic of NWW, in combination with ICT innovations that enhance time- and location-independent working. Baane, Houtkamp, and Knotter (2010) have distinguished four work principles of NWW:

- time- and location-independent working
- results based management and autonomy
- full access to and use of knowledge, experience, and ideas
- flexible work relationships

Individually, none of the above four work principles can be described as 'new' (Peters et al., 2014); however, taken together as a group and facilitated by new technologies, these principles represent a new and innovative design for the organization of work. These work conditions (or HRM practices) give employees new opportunities for new and better ways of working, potentially offering employees a challenging and stimulating work environment that can enhance personal growth and work-related flow (Peters et al., 2014; Van der Heijden, Peters, & Kelliher, 2014).

Time- and location-independent working. Teleworking refers to ways of working in which employees conduct their work remotely, i.e., distant from a central location (Peters et al., 2011). The practice of teleworking has been in existence longer than NWW and is often associated with time- and location-independent working (Bijl, 2009). In some publications, teleworking is even synonymous with NWW (Smulders, Kraan, & Pot, 2011). However, time- and location-independent working also involves making adaptations to the work environment within organizations, so that employees can become 'detached' from a physical desk or workplace (Bijl, 2009). Concepts such as teleworking, flexible workplaces, and flexible office hours are also mentioned as core characteristics of NWW in the checklist designed by Van Breukelen et al. (2014). These more flexible ways of working have become technically possible and financially affordable due developments in ICT, and enable employees to decide themselves when to carry out their professional activities (Bijl, 2009). The advantages of NWW for employers include savings in the costs associated with office space and commuting, and the increased likelihood that employees will become more productive and more satisfied (Bailey & Kurland, 2002; Martínez Sánchez, Pérez Pérez,

De Luis Carnicer, & Vela Jiménez, 2007). Furthermore, employees tend to save travel time, experience greater freedom and flexibility, and, as a result, achieve a better work-life balance. However, time- and location-independent working also has its disadvantages. Managers face new challenges related to trust and the monitoring of social cohesion. Teleworkers have reported that they have to deal with a lack of balance between work and personal life and with social isolation (Demerouti et al., 2014; Peters, Den Dulk, & Van der Lippe, 2009). Moreover, employees who have a strong need for structure in their professional activities may experience insecurity (Rietzschel, Slijkhuis, & Van Yperen, 2014). Research on open-plan offices has shown that they are associated with increased cooperation, but also with negative consequences such as absenteeism, reduced job satisfaction, and even lower productivity (De Paoli & Ropo, 2015; Pejtersen, Feveile, Christensen, & Burr, 2011).

Result based management and autonomy. Direct or management control strategies, in the traditional sense, are not suitable for employees working in an increasingly time- and location-independent manner. However, many organizations still operate under the traditional principles of 'command and control', which conflicts with NWW principles regarding autonomy and flexibility (Ten Brummelhuis et al., 2012). NWW requires a culture of trust within organizations in which managers and staff can trust each other (Henttonen & Blomqvist, 2005; Peters et al., 2011). However, within the context of NWW, employees gain not only a higher degree of freedom, but also more responsibilities (Bijl, 2009). These responsibilities arise from the focus organizations increasingly place on achieving results (Baane, 2011). Many Employees are no longer assessed on their presence in the workplace or their way of working, but in terms of their results (Peters, Den Dulk, & De Ruijter, 2010; Van Breukelen et al., 2014). From a theoretical perspective, this increased freedom of choice can be regarded as professional autonomy. Ten Brummelhuis et al. (2012) emphasizes that, in addition to increased flexibility, employees tend to have more professional autonomy in deciding when and where to work, aided by new information and communication technologies. In the job characteristics model (JCM) proposed by Hackman and Oldham (1975, 1976), professional autonomy – in addition to task identity, task significance, skill variety and feedback – is one of the key job characteristics that enhance performance. When linking the four distinguishing characteristics of NWW with those defined in the JCM (Hackman & Oldham, 1975, 1976), one can expect that they are likely to increase employees' autonomy, but also provide an improvement in the competences required to deal with the freedom that is offered by time and location-independent working. In addition, task identity (where does work start and end?) and task significance (the degree to which professional activities affect other colleagues as well as the organizational environment) can be linked to the characteristics of NWW. Finally, feedback is also important within NWW contexts. According to the JCM, when

these job characteristics are enhanced, they can enrich an employee's personal development and growth, which may subsequently exert a positive influence on work outcomes.

Full access to and use of knowledge, experience and ideas. In order to make the best possible use of this increased flexibility and autonomy, employees need to have free and full access to knowledge and information, without any hierarchical constraints (Baane, 2011). Since there is greater access to knowledge and information in today's world, this is no longer the privilege of a select group of managers. ICT innovations and opportunities play an important facilitating role. Information has to be shared and distributed frequently and easily, at both horizontal as well as vertical levels within organizations (De Spiegelaere et al., 2013b). However, human factors and interpersonal relationships also play an important role in knowledge sharing and virtual cooperation. In fact, this role may well be more decisive than the role played by technological factors (Zakaria, Amelinckx, & Wilemon, 2004).

Flexible work relationships. The fourth work principle of NWW concerns flexible work relationships. Post-war generations have become used to traditional work relationships, usually of indeterminate length, established in full-time positions with fixed rewards. However, this kind of work relationship does not meet the requirements of NWW in which the main focus is on autonomy and flexibility (Baane, 2011). NWW is associated with greater flexibility in terms of work relationships, and more specialisation. Moreover, NWW requires the use of more part-time contracts and is based on a system in which rewards are determined by performance outcomes (employee outcomes as well as organizational outcomes) (De Spiegelaere et al., 2013b). These requirements fit well with contemporary trends of increased flexibility of the Dutch labour market (Muffels & Dekker, 2012). This raises the question of whether such relationships effectively belong to NWW's set of distinguishing work principles? Some publications particularly emphasize flexibility in NWW (cf. Kelliher & Anderson, 2010); others focus on the associated degree of autonomy (cf. Ten Brummelhuis et al., 2012), or the increasing emphasis on final outcomes and results (Peters et al., 2014).

3.2.2 Teams and shared leadership in NWW

Over time, the possibility of working remotely has also changed the nature of working in teams: there has been a transition from working in traditional teams, where employees are physically grouped together, to working in 'virtual' teams, where team members can work at different moments and in different locations. Since it is not always possible for

managers of virtual teams to check on their team members or get in contact with them, teams need to organize and have control over their own activities. Leadership tasks need to be distributed among the team members themselves, and structures and procedures are needed to enhance self-management activities (Bell & Kozlowski, 2002; Hoch & Kozlowski, 2014). For this reason, teams must be able to (and have the opportunity to) steer and organize themselves, and different team members need to be able to take responsibility for their own tasks.

In more traditional, bureaucratic forms of organizations, the leadership role is often assigned to a formal leader or manager (Diefenbach & Sillince, 2011). This type of leadership is known as vertical or hierarchical leadership; However, shared leadership approaches – characterized by horizontal or lateral influence among group members - can also work well for groups of employees working in teams (Erkutlu, 2012; Pearce & Conger, 2002). In shared leadership, the influence exerted by team members is flexible and frequently mutual, and team members take on those leadership tasks for which they are best suited, or particularly motivated or expertly qualified to complete (Bligh, Pearce & Kohles, 2006; Bolden, 2011). In this way, leadership can be temporary and is shared between a number of individuals rather than being confined to (top) management or those in a formal leadership position (Erkutlu, 2012). Such teams enjoy considerable degrees of freedom and are largely self-organizing. The team leader operates as a coach, gives advice to the team members, and exerts control only where and when needed. In summary, shared leadership is not related to single individuals, but involves the entire team (Hiller, 2002; Hiller, Day, & Vance, 2006), also in instances where decision making is needed (Carson, Tesluk, & Marrone, 2007).

Since employees often work at different locations and at different times, there may not always be a single physical location where everyone can meet on a daily basis, and where managers can play a visible role. As a consequence of this, managers need to adopt a different role, and, when necessary, be capable of letting things go and steering on results whilst dealing with the geographic distance and independence (Van Dooren, 2011; Yukl & Mahsud, 2010). Working in teams can be seen as a consequence of the opportunities that NWW has to offer. Teams will be able to work increasingly autonomously, as they become more self-organizing and capable of making decisions - hence they will display more shared leadership. In line with these ideas, we formulated the following hypothesis:

Hypothesis 1: Within one organization, employees who operate in teams and who have access to NWW will experience shared leadership more frequently than employees who do not (yet) have access to NWW.

3.2.3 Workplace proactivity

One of the distinguishing work principles of NWW is the greater autonomy offered to employees (Baane, 2011). At the individual level, autonomy is an important determinant of certain aspects of workplace proactivity, such as anticipating and responding to potential problems, and generating ideas (Parker, Williams, & Turner, 2006). Workplace proactivity is focused on taking the initiative in order to improve current conditions or to create new opportunities (Crant, 2000). The essential characteristics of workplace proactivity include the ability to change one's actual situation in an accurate and straightforward way, and to anticipate future developments instead of experiencing them passively (Bateman & Crant, 1993, 1999). Workplace proactivity includes looking for opportunities, showing initiative, taking action, and persisting until the intended change has been realized. Workplace proactivity is therefore distinguishable from reactive or adaptive behaviour. Over the years, considerable research has been carried out regarding the factors that influence the workplace proactivity of employees. For example, the impact of transformational leadership (Crant, 2000), individual factors such as personality traits (Frese & Fay, 2001), and contextual factors such as insecurity and organizational values have all been explored with respect to workplace proactivity (Parker et al., 2006).

Although rooted in the behaviour of individual actors (Bateman & Crant, 1993), workplace proactivity can be studied at the level of teams and groups, as those teams (by definition) consist of a number of individuals who may each display some form of workplace proactivity. From a theoretical perspective, workplace proactivity in teams resembles workplace proactivity at the level of the individual (Erkutlu & Chafra, 2012; Williams et al., 2010). However, team workplace proactivity is seen as a collective enterprise in the sense that the team operates together, as a mutually dependent and goal-oriented group of individuals (Morgeson & Hofmann, 1999). Despite the fact that little research has investigated the antecedents and outcomes of team workplace proactivity, studies have shown that proactive teams tend to generate positive results (Tesluk & Mathieu, 1999). Kirkman and Rosen (1999) found that workplace proactivity in a team is positively associated with efficient customer services and productivity at the team level. According to Williams et al. (2010), teams which share greater joint responsibility for their daily tasks also demonstrate higher scores in terms of proactive problem-solving behaviour and innovation.

Within the context of NWW, teams have greater flexibility and autonomy, and more opportunities to organize their work in an independent way. Research has shown that 'empowerment' has a positive influence on the workplace proactivity of teams (De Jong & De Ruyter, 2004; Kirkman & Rosen, 1999; Strauss, Griffin, & Rafferty, 2009). We can

therefore expect that teams operating in NWW contexts will be more inclined to display workplace proactivity. Based on research by Erkutlu (2012) and Erkutluu and Shafra (2012), a positive effect of greater autonomy on workplace proactivity is assumed to occur for individuals as well as for teams. We propose the following hypotheses:

Hypothesis 2: Within one organization employees who operate in teams and who have access to NWW will demonstrate more workplace proactivity than employees who do not (yet) have access to NWW.

Hypothesis 3: Within one organization, employees who operate in teams and who have access to NWW will experience more team-based workplace proactivity than employees who do not (yet) have access to NWW.

3.3 Method

3.3.1 Research design

A quasi-experimental research design was used to measure the effects of NWW on shared leadership and workplace proactivity. We compared measurements taken in a group of employees who operate according to the principles of NWW and a comparable group of employees who do not (yet) operate in this way. The study was conducted in a business unit of IT & Change of a company active in the financial sector which had intended to implement NWW. Following initial preparations in 2006, the organization launched the implementation of NWW in 2007, but the finalization of this process suffered from the effects of the 2008 financial crisis. The program was scaled down, and the initial number of 5000 participating employees was reduced to 500 people. In addition, a decision was made to introduce only limited adjustments to existing buildings and the physical environment (Bijl, 2009). From 2010 onwards, NWW has been introduced on a wider scale within the organization. Some of the teams in this business unit were already working according to the NWW principles, but others have not (yet) embraced this way of working.

From a methodological perspective, the advantage of this incidental development is that any bias related to potentially confounding effects exerted by ambient variables was excluded. As the initial intention of the organization was to enable all employees to make the transition to NWW, no prior selection was made in assigning NWW and non-NWW employees to specific groups. Employees could not choose a team themselves, but rather were assigned to a team. Workplace proactivity was not taken into account in the

composition of teams, and there was no consideration of which employees might be better suited to working according to NWW principles. As a consequence, a systematic comparison can be made between the two groups in terms of shared leadership, workplace proactivity, and the consequences of working (or planning to work) according to NWW principles.

3.3.2 Data

Data were collected by inviting respondents to complete self-report online questionnaire. The employees were contacted three times via e-mail, as well as in person with a request to cooperate. A total of 348 team members were approached, all of them working in fixed, multidisciplinary teams consisting of an average of seven people. The teams are comparable in terms of their composition and generally represent the following positions/ roles: designers, testers, information specialists, application specialist managers, process analysts, and project managers. The effective response rate of the current study was 36.8% (128/348). The group of respondents consisted of 103 males and 24 females. Of this group, 56.3% were 45 years of age or younger. The average age was 41.8 years, with a standard deviation of 9.0 years. The majority of the respondents had followed higher education: 52% at bachelor's degree level and 39.4% at master's degree level. A large proportion of the respondents (32.7%) had been employed at the bank for a period of 5 to 10 years, and a considerable number had been active in this organization for 10 to 20 years (28.3%). The average number of years of tenure was 10.3 years, with a standard deviation of 8.8 years. In total, 51 respondents indicated that they worked according to NWW principles (39.8%); 77 (60.2%) respondents indicated that they did not work according to these principles.

3.3.3 Measures

Respondents were split into a group whose members operated in line with NWW and a group whose members did not. Respondents were asked to indicate whether or not they worked according to NWW principles. The question was formulated as follows: 'Do you work according to the principles of New Ways of Working (NWW)?'. As the respondents were all working for this particular organization, it was clear to which group they belonged: during the transition towards NWW, some employees had been assigned to make the change and some had not.

New Ways of Working represents a collective term for new styles of management and ways of working. Bijl (2009) distinguishes between four main factors and areas of focus within NWW: ICT resources, the physical work environment (flexible workplaces, working remotely), the organization (strategy, structure, and culture), and finally the attitudes and mind-sets of individuals within the organization (e.g., mutual respect and trust). We used the items developed by Bijl (2009) which enables employees and organizations to assess how far they have progressed in applying the principles of NWW. Those items comprises 16 statements (see Appendix A) which assess the four main factors mentioned above. Appendix B summarizes the results of the factor analysis; on the basis of these results, we decided to exclude two items related to the topic of 'the physical work environment' from our analyses. The reliability of the four factors of interest proved to be acceptable (Cronbach's alphas for these four factors were .74; .75; .69; and .71). As expected, NWW employees demonstrated higher scores on NWW work principles than their non-NWW counterparts. Scores on the main factors of NWW were not used to test the hypotheses, but as an additional source of information for interpreting the results (particularly by using the correlation analysis).

The other variables were measured as 'multiple item constructs'. The degree of *shared leadership* indicates the extent to which team members share the leadership role. Shared leadership was measured using the questionnaire developed by Hiller et al. (2006). This questionnaire consists of 25 statements. Responses to these statements were measured on a five-point Likert scale with response options ranging from 1 ('never') to 5 ('always'). The statements concern the frequency of joint activities (sharing) in the following domains: planning and organization, problem solving, support and consideration, and finally development and mentoring. Planning and organization and problem solving are both task-related dimensions of shared leadership. Support and consideration and development and mentoring, on the other hand, are social dimensions of shared leadership. Examples of joint activities with respect to the task-related dimension include 'Planning work' and 'Deciding how we do our work' (planning and organization), and 'Diagnosing problems' and 'Developing solutions to problems' (problem solving). Examples of activities related to the social dimension include 'Listening to complaints and problems experienced by fellow team members' (support and consideration), 'Learning from skills demonstrated by all other team members', and 'Indicating how they (underperforming team members) can improve themselves' (development and mentoring). Following Hiller et al. (2006), a confirmatory factor analysis was carried out, and on the basis of these results two items were excluded with respect to 'problem solving' and three items with respect to 'support and consideration'. The Cronbach's alphas of the four factors were relatively high (.86; .86; .80; .88), suggesting that the items reliably measured each of the four dimensions.

Workplace proactivity of the individual team members and of the teams - as perceived by the respondents - was measured with the validated questionnaire developed by Erkutlu (2012) and Bateman and Crant (1993). To measure the workplace proactivity of teams, Erkutlu (2012) included items which were derived from seven items that were initially incorporated in the questionnaire on individual workplace proactivity compiled by Bateman and Crant (1993). Erkutlu's scale (2012) focuses on the workplace proactivity of the team ('Our team constantly searches for better ways of doing things'), whilst Bateman and Crant's scale (1993) focuses on the workplace proactivity of the individual. Sample items of the scale used in the present study include 'I constantly search for ways to improve myself', and 'When I notice something that I consider to be wrong, I try to solve it'. The reliability of both scales was found to be high, as shown by the Cronbach's alphas (.83 for workplace proactivity of the team and .87 for workplace proactivity of individuals).

3.4 Results

3.4.1 Correlations between variables

Table 3.1 shows the means and standard deviations, and the correlations between the variables included in the study. In line with expectations, positive relationships were found between NWW and the workplace proactivity of individuals ($r = .29$, $p < .01$), as well as the workplace proactivity of teams ($r = .22$, $p < .05$). The results also indicate the apparent absence of a relationship between NWW and the components of shared leadership (with r ranging from .01 to .09), as well as between the work principles of NWW as measured by the instrument of Bijl (2009) and the components of shared leadership. Table 3.1 also shows that there is a relationship between the four components of shared leadership and workplace proactivity (for individuals as well as teams). There is also a strong, statistically significant relationship between the workplace proactivity of individuals and the workplace proactivity of teams ($r = .48$, $p < .01$).

Table 3.1 Means, standard deviations and correlations between variables

		M	*SD*	1	2a	2b	2c	2d	3a	3b	3c	3d	4
1	NWW[1]	0.40	0.49										
2a	ICT resources[2]	3.35	0.79	.40*									
2b	Physical work environment[2]	3.24	0.75	.46 **	.46 **								
2c	Human factors and attitudes[2]	3.90	0.59	.29 **	.43 **	.39 **							
2d	Organization[2]	3.39	0.65	.23 *	.37 **	.48 **	.38 **						
3a	Planning and organizing[3]	3.23	0.76	.09	.07	.06	.16	.11					
3b	Problem solving[3]	3.36	0.72	.03	.23 *	.06	.30 **	.16	.58 **				
3c	Support and consideration [3]	3.58	0.71	.01	.10	.11	.22 *	.11	.47 **	.51 **			
3d	Development and mentoring[3]	2.75	0.70	.08	.15	.17	.36 **	.27 **	.45 **	.42 **	.61 **		
4	Workplace proactivity of individuals in teams	3.54	0.46	.29 **	.09	.18 *	.45 **	.16	.27 **	.31 **	.30 **	.38 **	
5	Workplace proactivity of teams	3.64	0.58	.22 *	.15	.22 *	.51 **	.38 **	.35 **	.39 **	.43 **	.56 **	.48 **

Note. 1 = Dummy variable: 77 non-NWW employees (0) en 51 NWW employees (1); 2 = NWW characteristics; 3 = Elements of shared leadership.
* $p < .05$ (two-sided test); ** $p < .01$ (two-sided test)

Scores for the four work principles of NWW (cf. Bijl, 2009) can be regarded as indicating the extent to which the organization has progressed in the implementation of NWW. Noticeable are the correlations between these four work principles on the one hand and shared leadership and workplace proactivity on the other hand. The current study distinguishes between four working principles of NWW. In some publications, NWW is seen as being more or less identical to teleworking, and the main focus is on the first two work principles of NWW: 'ICT resources' and the 'physical work environment' (including the possibility to work from home and the absence of a fixed workplace or work environment within the organization). Our results, however, suggest that 'ICT resources' is only positively associated with 'problem solving' in teams, and not with the other components of shared leadership. In addition, there does not seem to be a relationship between ICT resources and individual or team workplace proactivity. We found a weak positive association between the physical work environment and the workplace proactivity of both teams and individual employees. No association was observed between the physical work environment and the elements of shared leadership. The most evident and

remarkable relationship seems to be the association between 'human factors and attitudes' and shared leadership and workplace proactivity. However, there is only a weak association between 'organization' and 'Development and mentoring' according to the table

Albeit with some caution, we can still tentatively conclude that work principles which are associated with 'human factors and attitudes', such as 'giving and receiving honest feedback', 'greater freedom and responsibility', and 'greater internal ownership and entrepreneurial spirit', are of importance for organizations which promote shared leadership and encourage workplace proactivity. In fact, work principles related to 'human factors and attitudes' could be more important than the (exclusive) facilitation of 'ICT resources' and offering a 'flexible work environment'.

3.4.2 NWW: shared leadership and workplace proactivity

Since the individual employees were grouped within teams, a multi-level analysis may have been appropriate. However, the study included only 14 teams, and this does not meet the minimum requirement of 30 groups needed for multi-level analyses (Maas & Hox, 2005). Our analyses showed that team distributions are similar: both teams represent the same kind of positions. In addition, team sizes and team members' gender and age are comparable. In light of this, team differences – other than differences caused by our research variables – were expected to be limited. Therefore, hypotheses were tested using multivariate analysis (MANCOVA).

The results of the multivariate covariance analysis testing the differences between NWW employees and non-NWW employees are presented in Table 3.2. By performing a MANCOVA (with Bonferroni adjustments), we controlled for confounding effects exerted by the other variables. The tests of 'between-subjects' effects are shown per 'subset'. Table 3.2 also shows the effect sizes (Partial Eta Squared). The effect size of the components of shared leadership are relatively weak; the effect of workplace proactivity of individuals can be qualified as average, and the effect size of workplace proactivity of teams is relatively strong. Wilks' lambda is 0.89, which indicates a considerable degree of unexplained variance (F value= 2.356; $p < .05$). The components of shared leadership do not show a significant relationship with NWW. We therefore conclude that no support could be found for Hypothesis 1.

Table 3.2 Univariate test results (MANCOVA)

Variable	Group	*M*[2]	Standard error (*SE*)	*F*-value	*p*-value	Effect size[3]
Planning and organizing [1]	NNW	3.27	0.08	0.17	0.68	0.001
	non-NNW	3.22	0.07			
Problem solving [1]	NNW	3.35	0.07	0.17	0.68	0.001
	non-NNW	3.39	0.06			
Support and consideration [1]	NNW	3.58	0.07	0.28	0.60	0.002
	non-NNW	3.63	0.05			
Development and mentoring [1]	NNW	2.72	0.07	0.22	0.64	0.002
	non-NNW	2.76	0.06			
Individual workplace proactivity	NNW	3.72	0.06	2.32	0.13	0.019
	non-NNW	3.59	0.05			
Workplace proactivity of teams	NNW	3.65	0.06	6.83	0.01	0.054
	non-NNW	3.46	0.05			

Note. 1 = Components of shared leadership; 2 = Estimated Marginal means; 3 = Partial Eta Squared

Table 3.2 also shows the apparent absence of a relationship between NWW and the workplace proactivity of individuals in teams. Hypothesis 2 was therefore not supported. The corrected mean score for NWW employees is 3.72; the mean score for non-NWW employees is 3.59. Statistically, the difference (0.13) is not significant: F (1, 125) = 2.32, p > .05. Since we controlled for covariate effects, i.e., the four components of shared leadership and particularly the workplace proactivity of teams, possible effects of the workplace proactivity of individuals in teams may have been dampened.

The MANCOVA results for the association between NWW and the workplace proactivity of teams indicate that there is a statistically significant relationship, also after corrections for covariate effects. The adjusted difference between NWW employees and non-NWW employees is 0.19. Scores for NWW and non-NWW employees are 3.65 and 3.46, respectively. This means that the effect is significant, F (1, 125) = 6.83, p < .05, and hence Hypothesis 3 is supported.

3.4.3 Mediation analysis: NWW and workplace proactivity of teams

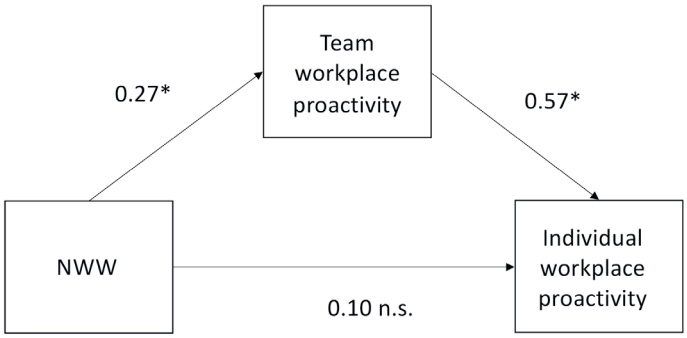
In addition to the analyses mentioned above, we also tested whether and to what extent the relationship between NWW and the workplace proactivity of individuals was mediated by the workplace proactivity of teams. Reasons for analysing this in greater detail are the MANCOVA results regarding the association between NWW and the workplace proactivity of teams on the one hand, and the strong correlation between the workplace proactivity of teams and the workplace proactivity of individuals in teams (r = .48) on the other hand. Taken together, a mediation effect was expected: through a positive influence on the workplace proactivity of teams, NWW may ultimately also have a positive effect on the workplace proactivity of individuals in teams. In line with this, we assumed that NWW initially stimulates teams to develop workplace proactivity which, in turn, may influence the behaviour of individuals. This assumption was tested with the help of the mediation analysis method developed by Preacher and Hayes (2004), and more specifically the bootstrap resampling method (N = 5000).

Table 3.3 Mediation analysis results

Effect	**Regression coefficient (*B*)**	**Standard error (*SE*)**	***t*-value**
NWW -> workplace proactivity of teams	0.27 *	0.08	3.38
Workplace proactivity of teams -> workplace proactivity of individuals	0.57 *	0.10	5.70
Total effect	0.15 *	0.05	2.95
NWW -> workplace proactivity of individuals	0.10	0.10	1.07

Note. Numbers in column 2 represent non-standardized regression coefficients; * $p < .05$

The results in Table 3.3 show that there is a full mediation of the workplace proactivity of teams between NWW and the workplace proactivity of individuals. NWW has a statistically significant relationship with the workplace proactivity of teams, but not with the workplace proactivity of individuals. The total effect is significant that is also confirmed on the basis of the confidence interval. The lower end of this interval is 0.07, and the upper end is 0.28. Since zero does not lie within this 95% confidence level, we conclude that the indirect effect is significantly different from the total effect. Figure 3.1 depicts the representation of the results from the mediation analysis.



Note. Numbers represent (non-standardized) regression coefficients; * $p < .05$; (n.s.) = non-significant

Figure 3.1 Mediation model 4 (Preacher & Hayes, 2004) for NWW, workplace proactivity of teams, and workplace proactivity of individuals

3.5 Discussion and theoretical contributions

The aim of the present study was to investigate the relationship between working in NWW contexts, shared leadership and workplace proactivity. In contrast to expectations, no significant relationships were found between employees' adoption of NWW and the four different components of shared leadership. Stimulating shared leadership within a team might be a challenge for team leaders, as they may feel responsible for adopting the leadership role by themselves. Team leaders seem to struggle with their new role in NWW contexts. This is in line with Pearce's (2004) suggestion that team leaders need to learn more precisely when their 'hands-on' intervention is required. Nevertheless, the same study conducted by Pearce (2004) shows that the traditional, vertical style of leadership remains relevant and necessary, and that these two forms of leadership (shared and traditional) can in fact complement and enhance rather than exclude each other. A final explanation can be found in the associations found between the work principles of NWW (cf. Bijl, 2009) and the components of shared leadership. The correlations indicate only weak associations between 'ICT resources' and 'the physical work environment' on the one hand and shared leadership on the other hand. However, NWW work principles related to 'human factors and attitudes' such as, for example, 'giving and receiving honest feedback', and 'greater internal ownership and entrepreneurial spirit', seem to be positively associated both with the workplace proactivity within teams and the degree of shared leadership. These are characteristics of NWW that refer to professional autonomy, one of the five job characteristics outlined in Hackman and Oldham's job characteristics model (1975, 1976).

Williams et al. (2010) regard autonomy as an important determinant of a team's workplace proactivity. Teams that experience a sense of control over their work and are involved in challenging tasks will develop a shared sense of collective performance, something that will subsequently create the adjusted climate necessary for proactive team behaviour. Additional analyses showed that NWW results in increased proactive team behaviour, which may subsequently foster more workplace proactivity on the part of individuals. However, whilst studies conducted by Erkutlu and Chafra (2012) observed a moderating effect of individual workplace proactivity on the relationship between team empowerment and team workplace proactivity, the results found in the present study point towards a mediating effect of team workplace proactivity on the relationship between NWW and individual workplace proactivity. A possible explanation for this result can be found in the literature on self-management (Bligh, et al., 2006). When workplace proactivity occurs in teams, this will also motivate individual team members to exhibit workplace proactivity. In order to be active and show workplace proactivity, these individuals need to feel sufficiently comfortable, and they should be concerned that this behaviour gives rise to any risks. When these conditions are met, employees will also be more encouraged to demonstrate workplace proactivity as individuals (Williams et al., 2010). This is in line with the literature on group behaviour and group standards. When a certain group embraces a standard that is supportive to change, employees may take the opportunity to display leadership, as they consider this a chance to obtain approval from the group (Scott & Bruce, 1994). Morrison and Phelps (1999) also argue that the workplace proactivity of individuals is stimulated when one of the group standards involves support which is coming from within the team. In line with the above, this could explain the effect of workplace proactivity at the team level, as perceived by employees, on the workplace proactivity of individual team members.

3.6 Limitations and avenues for further research

The current study has a number of limitations.

First, the analyses and conclusions are based on measurements taken within one organization, and responses were collected at one specific moment in time. We did not have any baseline measurements, which limits the validity of the results. Although this may be difficult to realize in practice, an experimental study could shed greater insights on the relationships investigated in the current research project. Of further interest would be to distinguish between how employees perceive NWW and how they actually apply it in practice (cf. Peters et al., 2014). In a similar vein, research could be carried out to help determine which kinds of employees are comfortable working in NWW contexts and

which are not: it is to be expected that not everybody is sufficiently equipped to deal with the combination of greater freedom and responsibility. Shared leadership, for instance, will not be equally effective for all employees.

Second, our study did not consider team composition. As a result, we cannot draw any conclusions concerning team members' scores in terms of individual workplace proactivity and the impact of shared leadership. Follow-up studies could explicitly focus on team composition and the potential influence of shared leadership on team composition. Further research could also try to determine whether, and to what extent, shared leadership - as seen in today's professional practice - is aligned with NWW, and what the subsequent effects would be on team operations and team functioning. Future research could offer further insight into the precise role played by shared leadership in combination with various forms of vertical leadership in teams working within the context of NWW.

Finally, the study was conducted with a specific group of ICT professionals in a specific department within a banking and insurance environment. As both groups work within the same organization, any potentially confounding effects exerted by ambient variables were excluded. One can expect that the outcomes of our study will be relevant to many other highly educated knowledge workers. However, it would be worthwhile to explore the dynamics and issues in relation to employees from other departments and business units, not only within this particular organization but also within other organizations and knowledge-intensive sectors. This could increase the generalizability of the study outcomes.

3.7 Management implications

Our findings have a number of practical implications for HR staff and HR departments, organizational leaders, and employees who need to be more responsive and proactive in NWW contexts.

First, one consequence of the transition to NWW may be that teams show greater degrees of initiative and greater degrees of ownership and entrepreneurial spirit. Team workplace proactivity can subsequently have an effect on the workplace proactivity demonstrated by individual employees. In this regard, the implementation of NWW can offer excellent opportunities for those organizations where workplace proactivity is important for their business success.

Second, organizations that (would like to) embrace NWW need to be aware that this choice may not automatically lead to the desired results. Extant literature indicates that

NWW requires a different style of management and leadership (Baane et al., 2010; Bijl, 2009). Shared leadership is often considered to be an appropriate leadership style in NWW contexts, although this did not prove to be the case in the business unit investigated here.

References

Baane, R. (2011). Het Nieuwe Werken ontrafeld. Over Bricks, Bytes & Behaviour. T*ijdschrift voor HRM*, *141*(1), 7-23.

Baane, R., Houtkamp, P., & Knotter, M. (2010). *Het nieuwe werken ontrafeld*. Assen, The Netherlands: Van Gorcum.

Bailey, D.E., & Kurland, N.B. (2002). A review of telework research: Findings, new directions, and lessons for the study of modern work. *Journal of Organizational Behaviour*, *23*(4), 383-400.

Bateman, T.S., & Crant, J.M. (1993). The proactive component of organizational behaviour: A measure and correlates. *Journal of Organizational Behaviour*, *14*(2), 103-118.

Bateman, T.S., & Crant, J.M. (1999). Workplace proactivity: Meaning, impact, recommendations. *Business Horizons*, *42*(3), 63-70.

Bell, B.S., & Kozlowski, S.W. (2002). A typology of virtual teams: implications for effective leadership. *Group & Organization Management*, *27*(1), 14-49.

Bijl, D. (2009). *Aan de slag met Het Nieuwe Werken*. Zeewolde, the Netherlands: Par CC.

Bligh, M.C., Pearce, C.L., & Kohles, J.C. (2006). The importance of self and shared leadership in team based knowledge work: A meso-level model of leadership dynamics. *Journal of Managerial Psychology* , *21*(4), 296-318.

Blok, M.M., Groenesteijn, L., Schelvis, R., & Vink, P. (2012). New ways of working: does flexibility in time and location of work change work behaviour and affect business outcomes? *Work: A Journal of Prevention, Assessment & Rehabilitation*, *41*(1), 5075-5080.

Bolden, R. (2011). Distributed leadership in Organizations: a review of theory and research. *International Journal of Management Reviews*, *13*(3), 251-269.

Carson, J.B., Tesluk, P.E., & Marrone, J.A. (2007). Shared leadership in teams: an investigation of antecedent conditions and performance. *Academy of Management Journal*, *50*(5), 1217-1234.

Cisco Connected World Technology Report (2015). Retrieved April 13, 2015, from http://www.cisco.com/c/en/us/solutions/enterprise/connected-world-technology-report/index.html

Crant, J.M. (2000). Workplace proactivity in organizations. *Journal of Management*, *26*(3), 435-462.

Demerouti, E., Derks, D., Ten Brummelhuis, L.L., & Bakker, A.B. (2014). New ways of working: Impact on working conditions, work-family balance, and well-being. In C. Korunkia, & P. Hoonakker (Eds.), *The Impact of ICT on Quality of Working Life* (pp. 123-141). Berlin: Springer.

De Groot, W., & De Rouw, M. (2011). Met Rabo unplugged in verbinding met de wereld van morgen. *Tijdschrift voor HRM*, *1*, 48-54.

De Jong, A.D., & De Ruyter, K. (2004). Adaptive versus workplace proactivity in service recovery: The role of self-managing teams. *Decision Sciences*, *3*5(3), 457-491

De Paoli, D., & Ropo, A. (2015). Open-plan offices-the response to leadership challenges of virtual project work? *Journal of Corporate Real Estate*, *17*(1), 63-74.

De Pous, V.A., & Van der Wielen, J.M.M. (Red.). (2010). *Praktijkvisies op Het Nieuwe Werken.* Meppel, The Netherlands: Ten Brink, Uitgeverij Tiem.

De Spiegelaere, S., Van Gyes, G., Benders, J., & Van Hootegem, G. (2013a). Wat werkt van het Nieuwe Werken? *Tijdschrift van het Steunpunt* WSE, *23*(3), 66-72.

De Spiegelaere, S., Van Gyes, G., Benders, J., & Van Hootegem, G. (2013b). Nieuw, maar daarom niet altijd beter: Over de relatie tussen Het Nieuwe Werken en het innovatief gedrag van werknemers. In R. Kok, H. Lekkerkerk, & P. Vermeulen (Red.), *Versterking van innovatie: Liber Amicorum voor Ben Dankbaar* (249-261). Den Haag, The Netherlands: Boom Lemma uitgevers.

Diefenbach, T., & Sillince, J.A. (2011). Formal and informal hierarchy in different types of organization. *Organization Studies*, *32*(11), 1515-1537.

Erkutlu, H. (2012). The Impact of organizational culture on the relationship between shared leadership and team workplace proactivity. *Team Performance Management: An International Journal*, *18*(1/2), 102-119.

Erkutlu, H., & Chafra, J. (2012). The impact of team empowerment on proactivity: The moderating roles of leader's emotional intelligence and proactive personality. *Journal of Health Organization and Management*, *26*(5), 560-577.

Frese, M., & Fay, D. (2001). Personal initiative: An active performance concept for work in the 21st century. *Research in Organizational Behaviour*, *23*, 133-187.

Gajendran, R.S., & Harrison, D.A. (2007). The good, the bad, and the unknown about tele- commuting: meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology*, *92*(6), 1524.

Gore, P.A. (2006). Academic self-efficacy as a predictor of college outcomes: Two incremental validity studies. *Journal of Career Assessment*, *14*(1), 92-115.

Grant, A.M., & Ashford, S.J. (2008). The dynamics of proactivity at work. *Research in Organizational Behaviour*, *28,* 3-34.

Hackman, J.R., & Oldham, G.R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, *60*(2), 159.

Hackman, J.R., & Oldham, G.R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behaviour and Human Performance*, *16*(2), 250-279.

Henttonen, K., & Blomqvist, K. (2005). Managing distance in a global virtual team: The evolution of trust through technology-mediated relational communication. *Strategic Change*, *14*(2), 107-119.

Hiller, N.J. (2002). *Understanding and Measuring Shared Leadership in Work Teams*. University Park, PA: Pennsylvania State University.

Hiller, N.J., Day, D.V., & Vance, R.J. (2006). Collective enactment of leadership roles and team effectiveness: A field study. *The Leadership Quarterly*, *17*(4), 387-397.

Hoch, J.E., & Kozlowski, W.J. (2014). Leading virtual teams: Hierarchical leadership, structural supports, and shared team leadership. *Journal of Applied Psychology*, *99*(3), 390-403.

Kelliher, C., & Anderson, D. (2010). Doing more with less? Flexible working practices and the intensification of work. *Human Relations*, *63*(1), 83-106.

Kidder, D.L., & Parks, J. M. (2001). The good soldier: who is s(he)? *Journal of Organizational Behaviour*, *22*(8), 939-959.

Kirkman, B.L., & Rosen, B. (1999). Beyond self-management: Antecedents and consequences of team empowerment. *Academy of Management Journal*, *42*(1), 58-74.

Kirkman, B.L., Rosen, B., Tesluk, P.E., & Gibson, C.B. (2004). The impact of team empowerment on virtual team performance: The moderating role of face-to-face interaction. *Academy of Management Journal*, *47*(2), 175-192.

Konradt, U. (2014), Toward a theory of dispersed leadership in teams: Model, findings, and directions for future research. *Leadership*, *10*(3), 289-307.

Maas, C.J., & Hox, J.J. (2005). Sufficient sample sizes for multilevel modelling. *Methodology*, *46*(1), 86-92.

Martínez Sánchez, A., Pérez Pérez, M., De Luis Carnicer, P., & Vela Jiménez, M.J. (2007). Teleworking and workplace flexibility: A study of impact on firm performance. *Personnel Review*, *36*(1), 42-64.

Morgeson, F.P., & Hofmann, D.A. (1999). The structure and function of collective constructs: Implications for multilevel research and theory development. *Academy of Management Review, 24*(2), 249-265.

Morrison, E.W., & Phelps, C.C. (1999). Taking charge at work: Extra-role efforts to initiate workplace change. *Academy of Management Journal*, *42*(4), 403-419.

Muffels, R., & Dekker, R. (2012). Flexibilisering en regulering van werkzekerheid. *Economisch Statistische Berichten*, *97*, 18-23.

Nationale Enquête over Het Nieuwe Werken. (2014). Retrieved March 14, 2015 from http://overhetnieuwewerken.nl/whitepapers/nationale-enqute-over-het-nieuwe-werken-2014-resultaten-onderzoek

O'Neill, T.A., Hambley, L.A., & Chatellier, G.S. (2014). Cyberslacking, engagement, and personality in distributed work environments. *Computers in Human Behaviour*, *40*, 152-160.

Parker, S.K., Williams, H.M., & Turner, N. (2006). Modelling the antecedents of workplace proactivity at work. *Journal of Applied Psychology*, *91*(3), 636-652.

Pearce, C.L. (2004). The future of leadership: Combining vertical and shared leadership to transform knowledge work. *Academy of Management Executive*, *18*(1), 17-56.

Pearce, C.L., & Conger, J.A. (2002). *Shared leadership: Reframing the hows and whys of leadership*. Thousand Oaks, CA: Sage Publications.

Pearce, C.L., Hoch, J., Jeppesen, J., & Wegge, J. (2010). New forms of management: Shared and distributed leadership in organizations. *Journal of Personnel Psychology*, *99*(4), 151-153.

Pejtersen, J.H., Feveile, H., Christensen, K.B., & Burr, H. (2011). Sickness absence associated with shared and open-plan offices – a national cross sectional questionnaire survey. *Scandinavian Journal of Work, Environment & Health*, *37*(5), 376-382.

Peters, P., De Bruijn, T., Bakker, A., & Van der Heiden, B. (2011). Plezier in Het Nieuwe Werken? Randvoorwaarden voor 'werk gerelateerde flow' onder nieuwe arbeidscondities. *Tijdschrift voor HRM*, *1*, 31-47.

Peters, P., Den Dulk, L., & De Ruijter, J. (2010). May I work from home? Views of the employment relationship reflected in line managers' telework attitudes in six financial-sector organizations. *Equality, Diversity and Inclusion: An International Journal*, *29*(5), 517-531.

Peters, P., Den Dulk, L., & Van der Lippe, T. (2009). The effects of time-spatial flexibility and new working conditions on employees' work-life balance: The Dutch case. *Community, Work & Family*, *12*(3), 279-297.

Peters P., Poutsma E., Van der Heijden B.J., Bakker A.B., & De Bruijn, A.T.D. (2014). Enjoying new ways to work: An HRM-process approach to study flow. *Human Resource Management*, *53*(2), 271-290.

Preacher, K.J., & Hayes, A.F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behaviour Research Methods, Instruments, and Computers*, *36*(40, 717-731.

Rietzschel, E. F., Slijkhuis, M., & Van Yperen, N. W. (2014). Close monitoring as a contextual stimulator: How need for structure affects the relation between close monitoring and work outcomes. European Journal of Work and Organizational Psychology, *23*(3), 394-404.

Scott, S.G., & Bruce, R.A. (1994). Determinants of innovative behaviour: A path model of individual innovation in the workplace. *Academy of Management Journal*, 37(3), 580-607.

Smulders, P., Kraan, K., & Pot, F. (2011). Telewerkers vormen een elite. *Economisch Statistische Berichten*, *96*(4616), 493-495.

Strauss, K., Griffin, M.A., & Rafferty, A.L. (2009). Proactivity directed toward the team and organization: The role of leadership, commitment and role-breadth self-efficacy. *British Journal of Management*, *20*(3), 279-291.

Ten Brummelhuis, L.L., Bakker, A.B., Hetland, J., & Keulemans, L. (2012). Do new ways of working foster work engagement? *Psicothema*, *24*(1), 113-120.

Tesluk, P.E., & Mathieu, J.E. (1999). Overcoming roadblocks to effectiveness: Incorporating management of performance barriers into models of work group effectiveness. *Journal of Applied Psychology*, *84*(2), 200-217.

Van Breukelen, W., Makkenze, S., & Waterreus, R. (2014). Kernaspecten van Het Nieuwe Werken en een checklist om deze in kaart te brengen. *Gedrag & Organisatie*, *27*(2), 157-187.

Van Dooren, J. (2011). *Handboek Het Nieuwe Werken*. Retrieved March 14, 2015 from www.werkennieuwestijl.nl

Williams, H.M., Parker, S.K., & Turner, N. (2010). Proactively performing teams: The role of work design, transformational leadership, and team composition. *Journal of Occupational and Organizational Psychology*, *83*(2), 301-324.

Yukl, G., & Mahsud, R. (2010). Why flexible and adaptive leadership is essential? *Consulting Psychology Journal: Practice and Research*, *62*(2), 81-93.

Zakaria, N., Amelinckx, A., & Wilemon, D. (2004). Working together apart? Building a knowledge-sharing culture for global virtual teams. *Creativity and Innovation Management, 13*(1), 15-29.

CHAPTER 4

‘Let’s share!’ The mediating role of employees’ self-determination in the relationship between transformational and shared leadership and perceived knowledge sharing behaviour among peers in NWW contexts

This chapter is published as Coun, M.J.H., Peters, P. , & Blomme, R.J. (2019). ‘Let’s share!’ The mediating role of employees’ self-determination in the relationships between transformational and shared leadership and perceived knowledge sharing behaviour among peers. *European Management Journal*, *37*(4), 481-491.

Summary

Knowledge sharing that is vital to new product development, has become a major risk factor in NWW where digital collaboration is a common practice. The aim of the study was to investigate the contribution of both shared leadership and transformational leadership of the hierarchical leader on employees' knowledge sharing within NWW contexts. Self-determination theory (SDT) is used as a theoretical lens to explain the underlying mechanisms in the relationship between leadership and knowledge sharing. A field study was conducted in two R&D units of a company in the foods for special medical purposes sector in the Netherlands, who have already adopted NWW. The results showed that sharing leadership is the most important single factor related to motivate employees to share knowledge among peers, both directly and indirectly via employees' satisfaction of the need for autonomy. Transformational leadership of the hierarchical leader was also found to have a positive relationship with employees' knowledge sharing, but only via shared leadership. In contrast to our expectations, we did not find a mediation effect for psychological needs satisfaction regarding relatedness, although a positive trend could be seen from both shared and transformational leadership towards the satisfaction of this need. Moreover, no mediation effect was found of psychological needs satisfaction with respect to competence. Finally, the study demonstrated that both shared leadership as well as their formal team leader play a role in employees' feelings of being self-determinate and autonomous which is important for the perception of the willingness of knowledge sharing behaviour among fellow employees.

4.1 Introduction

Influenced by trends such as globalization, individualization, and flexibilization, contemporary workplace designs are increasingly characterized by a decentralization of decision-making authority and responsibilities, reflected in more professional autonomy, teamwork, and management by objectives, running parallel with enhanced flexibility (cf. Peters, Den Dulk, & Van der Lippe, 2009; Spreitzer, Cameron, & Garret, 2017). These workplace redesigns may be driven by organizations' needs to address increasingly complex problems, something which demands diverse knowledge, skills, and expertise on the part of professionals who have to collectively develop creative and innovative solutions (Asharo, Gregg, & Ramirez, 2017).

Collective problem solving, including developing and promoting new ideas and implementing procedures, requires knowledge sharing, which refers to the provision of task information and know-how to help others and collaborate with others (Cummings, 2004). Some scholars are optimistic about the positive effects of these contemporary work designs on employee knowledge sharing (e.g., Asharo, Gregg, & Ramirez, 2017; Llopis & Foss, 2016; Mueller, 2014). However, others have reported insufficient collaboration and lower levels of knowledge sharing (e.g., De Paoli & Ropo, 2015; O'Neill, Hambley, & Chatellier, 2014).

Particularly, in knowledge-intensive industries and R&D units where employees from various disciplines and backgrounds are involved in dispersed and temporary teams, fragmentation of information can inhibit knowledge sharing among peers who have to collaborate (Coradi, Heinzen, & Boutellier, 2015; Mabey & Zhao, 2017). Knowledge sharing among peers may be disturbed because employees do not know who has relevant expertise or because they are not motivated to contribute more than only job-related information (Ellison, Gibbs, & Weber, 2015). Moreover, employees might be unwilling to share information because of perceptions of loss of personal power or knowledge ownership. If knowledge is not shared, the cognitive resources that are available within a team or an organization remain underutilized (Argote & Ingram, 2000). It is generally agreed that knowledge sharing does not occur automatically: employees have to be stimulated to proactively exchange knowledge and information, which is dependent on their willingness to share knowledge with peers (Lagerstrom & Andersson, 2003). Furthermore, the readiness to share knowledge can be promoted when employees also expect and perceive others to share knowledge. Studies have shown that in addition to job design, the interpretation of the role of leadership affects employees' motivation (Gagné, 2003; De Cooman, Stynen, Van den Broeck, Sels, & De Witte, 2013). Therefore, the question may be asked which form of leadership is effective in terms of creating perceptions of knowledge sharing among peers and what constitutes the underlying mechanisms.

There is some empirical evidence that shared leadership is positively associated with knowledge sharing (Han, Lee, Beyerlein, & Kolb, 2018; Lee, Lee, Seo, & Choi, 2015). The concept of shared leadership implies that individual employees jointly take responsibility for activities that used to be undertaken by formal leaders, by sharing these among each other and by influencing others through interaction (Carson, Tesluk, & Marrone, 2007; Pearce, 2004). As a result of social exchange (Blau, 1964), shared responsibility may foster employees' mutual trust, which not only enhances their readiness to share their expertise and the knowledge required for the proper performance of complex and innovative work activities together with their colleagues, but also their perceptions of their knowledge sharing behaviour being reciprocated. Hence, we need to investigate further if and how shared leadership may positively affect knowledge sharing among peers.

In addition, it can be argued that shared leadership does not eliminate the role of a formally appointed (team) leader. Instead of directing and controlling their employees, formal leaders have a role in supporting and developing shared leadership by coaching, inspiring, and stimulating informal collaboration among employees (Hoch, 2013; Pearce, 2004). These characteristics fit well with a transformational leadership style (e.g., Bass, 1990; Purvanova & Bono, 2009). There is some empirical evidence that transformational leadership encourages the development of shared leadership (Hoch, 2013). In a similar vein, the knowledge sharing literature has shown that transformational leadership is also an important predictor of knowledge sharing (e.g., Han, Seo, Li, & Yoon, 2016; Srivastava, Bartol, & Locke, 2006; Xiao, Zhang, & Ordóñez de Pablos, 2017). Therefore, transformational leadership on the part of a formally appointed leader might play a role both in enhancing shared leadership and in directly fostering knowledge sharing. Although the knowledge sharing literature has greatly expanded over the past decade (e.g., Dong, Bartol, Zhang, & Li, 2017; Kang & Lee, 2017; Wang & Noe, 2010), empirical research on the role of and the interrelationship between transformational and shared leadership in relation to knowledge sharing among peers has remained scarce.

In understanding how both shared and transformational leadership may contribute to knowledge sharing with peers, self-determination theory (SDT) (Deci & Ryan, 2000) might be a useful theoretical lens. SDT emphasizes that the satisfaction of three basic psychological needs (autonomy, competence, and relatedness) plays a role in the process of growth and development towards self-determination When people feel that their basic psychological needs are satisfied, they become self-determinate in their behaviour and may be expected to enjoy sharing their knowledge to a greater extent (Gagné, 2009). Shared leadership and transformational leadership demonstrated by a formal leader might influence the self-determination of employees, which in turn stimulates individual employees not only to have trust in other fellow employees when it comes to sharing

knowledge, but also to perceive that knowledge sharing with peers in the organization will be reciprocated. There is some empirical evidence that transformational leadership may promote employees' basic psychological needs satisfaction and, in turn, enhance job satisfaction and work engagement (Hetland, Hetland, Bakker, Demerouti, Andreassen, & Pallesen, 2015; Kovjanic, Schuh, & Jonas, 2013). However, research that examines how self-determination translates into employees' perceptions of knowledge sharing behaviour among peers is scarce. To the best of our knowledge, no studies have investigated the role of shared leadership in promoting employees' basic psychological needs satisfaction and how this, in turn, might impact employees' perceptions of knowledge sharing behaviour among peers. In view of the literature gaps discussed above, the aim of the present research is to investigate how both shared and transformational leadership may directly contribute to employees' perceptions of knowledge sharing behaviour among peers, or may do so indirectly via employees' basic psychological needs satisfaction.

The contribution of the present study is threefold. First, it extends previous research on knowledge sharing by examining the role of both shared and transformational leadership in fostering knowledge sharing behaviour among peers. This is done by focussing on the mechanism of social exchange. Second, our study enhances knowledge on the role of leadership in knowledge sharing by examining the influence of transformational leadership on the development of shared leadership and by examining the interrelatedness between the two styles which, in turn, creates a climate of knowledge sharing. We emphasize the importance of developing a better understanding of the changing role of leadership in knowledge sharing in contemporary workplaces. Finally, our study extends the literature on knowledge sharing by examining the (mediating) role of employees' self-determination as an explanatory mechanism to reveal how transformational and shared leadership might foster employees' knowledge sharing among peers.

4.2 Theoretical background and hypotheses

4.2.1 Shared leadership, transformational leadership and knowledge sharing behaviour

Knowledge sharing can be conceptualized as a flow activity, a kind of exchange where one party gives some explicit or tacit knowledge to another party, e.g., a person, a group, or a repository (cf. Staples & Webster, 2006). The exchange of knowledge is important for innovation and creativity in contemporary workplaces where employees often have to work in distributed teams, interacting via technological tools and splitting their time between multiple projects simultaneously (cf. Wageman, Gardner, & Mortensen, 2012). A typical characteristic of knowledge workers is their collaboration in relationships for which they and their colleagues have a joint and shared responsibility.

With regard to joint and shared responsibility, shared leadership has been found to be particularly appropriate in managing knowledge workers (Hoch, 2014). With Pearce and Conger (2003, p.1), we define shared leadership as: "a dynamic, interactive influence process among individuals in groups for which the objective is to lead one another to the achievement of group organizational goals". The concept of shared leadership refers to a situation in which leadership functions are voluntarily shared among employees in pursuit of collective goals, and the concept is characterized by collaborative decision-making and shared responsibility for performance (cf. Carson, Tesluk, & Marrone, 2007; Pearce & Conger, 2003). We know from social exchange theory (Blau, 1964) that employees participate in exchange behaviour since they think their benefits will justify their costs. However, since a lack of regulations and guidelines for interaction can hinder knowledge sharing among employees, interpersonal trust is particularly essential for social relations, as these demand cooperation and interdependency (Luo, 2002). Shared leadership encourages employees to become jointly responsible, which might contribute to the creation of a climate of trust that is conducive to cooperation and that promotes employees' willingness to share knowledge. Employees can thus rely on mutual inspiration and encouragement to build on each other's ideas by sharing knowledge, and they become willing to share knowledge among peers in return. Therefore, we posit that employees who are engaged in shared leadership perceive more knowledge sharing behaviour among their peers.

Hypothesis 1. Shared leadership has a direct and positive relationship with employees' perceptions of knowledge sharing behaviour among peers.

Despite the growing importance of shared leadership, it can be argued that a formal team leader remains important in fostering knowledge sharing behaviour among peers as he/she can contribute to the creation of a climate that is receptive to new ideas and that promotes these ideas among each other (Cabrera, Collins, & Salgado, 2006). Transformational leadership, appointed to a formal team leader, focuses on the relationship between a formal leader and his/her followers and may foster knowledge sharing (Bryant, 2003; Bass & Riggio, 2010). With a transformational leadership style, a formal leader has the capacity to create an atmosphere of trust that contributes to knowledge sharing by using charisma, encouraging intellectual development, and paying individual attention to workers. Leaders who are sensitive to individual needs of group members can respond with an appropriate blend of personal attention, encouragement, and challenge. Transformational leaders are capable of facilitating the development of a common sense that they and their employees share. Moreover, transformational leadership enables followers to transcend their own self-interests for a collective higher purpose, mission, or vision and to exceed performance expectations (Bass, 1985; Bass &

Riggio, 2006). From a social exchange perspective (Blau, 1964), we know that followers, when they receive supportive treatment from their leaders, are more likely to help each other in reaching goals by adopting behaviours that go beyond formal responsibilities. Transformational leadership may contribute to an atmosphere of trust to share knowledge. It is only when employees feel that their willingness to share knowledge is reciprocated by others that the work outcomes needed for a successful organization can be achieved. We expect that in contemporary workplaces, which are often highly flexible and individualized, transformational leadership has the capacity to create an atmosphere of trust that contributes to knowledge sharing and that may also foster employees' perceptions of knowledge sharing behaviour among peers.

Hypothesis 2. Transformational leadership has a direct and positive relationship with employees' perceptions of knowledge sharing behaviour among peers.

In modern work organizations, a formal leader does not usually have the substantive expertise that is needed to handle complex issues requiring innovative solutions. Hence, they are forced to empower their employees and to facilitate and encourage collaboration between a range of professionals in new team combinations. Since employees oftentimes work in geographically dispersed teams and have to communicate by means of modern technologies, a formally appointed leader has to take a new role in fostering team member leadership activities and encourage employees to higher levels of collaboration and coordination among colleagues (Allen & Vakalahi, 2013; Fausing, Jeonsson, Lewandowski, & Bligh, 2015). Indeed, the literature has shown that transformational leaders have a role in coaching and motivating employees to share leadership responsibilities by inspiring them to jointly achieve a general organizational purpose and specific team objectives (Wang, Oh, Courtright, & Colbert, 2011). Although conceptually different, shared leadership and transformational leadership are indeed interrelated. In fact, it can be argued that shared leadership and transformational leadership on the part of a formal leader are not mutually exclusive. Pearce (2004; 2008) already posited that transformational leadership exercised by a formal leader is an important antecedent of shared leadership. An empirical study conducted by Hoch (2014) demonstrated that transformational leadership influences the development of shared leadership, which in turn enhances employees' innovative behaviour. As shared leadership has a positive relationship with employees' knowledge sharing among peers, we posit that transformational leadership fosters shared leadership, and in turn has a positive effect on knowledge sharing among peers.

Hypothesis 3. Transformational leadership fosters shared leadership which in turn enhances employees' perceptions of knowledge sharing behaviour among peers.

4.2.2 The mediating role of basic psychological needs satisfaction

Self-determination theory (SDT) (Deci & Ryan, 2000) provides us with a theoretical lens to shed light on a possible underlying mechanism that can explain why shared and transformational leadership may foster employees to engage in knowledge sharing behaviour among their peers. The theory focuses on three basic psychological needs. The need for autonomy refers to individuals' need to act with a sense of ownership of their own behaviour and to feel psychologically free. Key is not whether an individual can choose or act independently from the desires of others, but to the extent to which this individual endorses that action as his own (Deci & Ryan, 2000). The need for competence is inherent to an individuals' natural desire to feel capable and effective to influence the environment as well as to search for challenges. In work settings, employees feel competent when they develop new skills, achieve goals, and adapt to changing environments (Van den Broeck, Vansteenkiste, De Witte, & Lens, 2008). The basic psychological need for relatedness represents the need to feel connected to others (Deci & Ryan, 2000). This need is satisfied when an individual sees himself or herself as a member of a group, experiences some feeling of community, and can develop close relations (Van den Broeck et al., 2008). These three basic psychological needs are innate, human necessities which must be satisfied to ensure optimal human functioning and well-being. SDT posits that self-determined autonomous motivation is the key mechanism by which the satisfaction of the three basic psychological needs influences employees' outcomes (Deci & Ryan, 2000).

Shared leadership seems to be appropriate in creating a context that facilitates employees' basic psychological needs satisfaction, which is likely to result in more self-determination on the part of the employee. According to Carson et al. (2007), shared leadership originates from individuals taking responsibility for activities that influence peers through interaction. Therefore, shared leadership can be expected to result in stronger feelings of autonomy since individuals will experience a greater sense of autonomy and control over their work (Houghton, Neck, & Manz, 2003). Furthermore, shared leadership promotes employees to engage in self-leadership and responsible followership (Neck, Houghton, Sardeshmukh, Goldsby, & Godwin, 2013). Since the need for autonomy involves viewing oneself as acting with a sense of freedom of choice, sharing leadership among fellow members might encourage situations in which employees' individual need for autonomy is satisfied. In addition, sharing leadership responsibilities could enhance employees' feelings of competence, because this offers them flexibility, optimal use of capacities and expertise, and opportunities for challenging tasks (Houghton, Pearce, Manz, Courtright, & Stewart, 2015). Therefore, when employees feel competent and skilled, because they can learn from and help their peers, the basic psychological need satisfaction

for competence will also be met. Finally, shared leadership can provide employees with an increasing sense of meaning, social support, and belongingness (Houghton et al., 2015). A sense of belongingness can energize employees and activate inclusion, and hence stimulate them to achieve shared work goals (Ellemers, De Gilder, & Haslam, 2004). For employees who feel that they are closely affiliated with their peers and able to share their joys and problems, shared leadership might facilitate psychological need satisfaction for relatedness. Moreover, shared leadership may prevent employees from feeling disconnected or isolated and distant from their peers, and therefore empower them to build and develop social ties with colleagues in the workplace. In this regard, we hypothesize that shared leadership meets employees' needs for autonomy, competence, and relatedness, thus leading to greater self-determination.

Hypothesis 4. Shared leadership has a direct and positive relationship with the satisfaction of employees' basic psychological needs for autonomy (4a), competence (4b), and relatedness (4c).

In the literature, the basic psychological needs satisfaction of followers resulting from formal leaders' transformational leadership has been postulated as the central explanatory mechanism enhancing followers' effectiveness and motivation (Bass, 1985; Bass & Riggio, 2010). In addition, a transformational leader causes individual followers to view their work as more meaningful and significant, which thus increases the intrinsic motivation potential (Zhu, Avolio, & Walumba, 2009). Transformational leadership is usually conceptualized as a set of four categories of interrelated behaviours on the part of formal leaders, namely 'idealized influencing through vision', 'inspirational motivation', 'intellectual stimulation', and 'individual consideration' (Bass, 1985). Since transformational leadership implies facilitating employees to handle additional responsibilities and giving them professional autonomy by encouraging them to solve problems, this kind of leadership is likely to be productive in fostering satisfaction with respect to the need for autonomy. Transformational leaders who appeal to employees' feelings and emotions, who transmit an enthusiastic vision of the future, and who express confidence about successfully reaching individual and team goals might enhance the satisfaction of the need for competence. In addition, by supporting employees in performing and mastering tasks, by spending time with them and coaching them, and by developing and encouraging their strengths, transformational leaders can enhance employees' self-awareness and realize their full potential, which satisfies their need for competence. Furthermore, transformational leaders support satisfaction of the need for relatedness through providing and encouraging team spirit by setting a vision for the group and providing it with a clear sense of purpose. In this regard, we hypothesize that transformational leadership influences needs satisfaction regarding autonomy, competence, and relatedness.

Hypothesis 5. Transformational leadership has a direct and positive relationship with the satisfaction of employees' basic psychological needs for autonomy (5a), competence (5b), and relatedness (5c).

Only when employees are willing to share knowledge with their peers can organizations manage their knowledge resources effectively (Lee & Choi, 2003). Therefore, it is necessary to know more about the key determinants of employees' knowledge sharing behaviours. Gagne (2009) hypothesized that employees' self-determination via psychological needs satisfaction is positively related to intrinsic motivation, which in turn stimulates knowledge sharing. We know from previous studies that there is a relationship between a high degree of job autonomy and knowledge sharing. Park, Ribiere, and Schulte (2004) found that encouraging teamwork, employee support, and autonomy fosters knowledge sharing, while a culture that is demanding of employees discourages knowledge sharing behaviour. Others have argued that autonomy is complementary to knowledge sharing (Llopis & Foss, 2016). In this regard, we posit that when employees experience that their need for autonomy is satisfied, they are also more likely to assume that their fellow peers will engage in knowledge sharing behaviour. Using the capacities and expertise of individual employees so that this responds to employees' cognition of competence may be similar to the concept of self-efficacy as proposed by Bandura (1986). Bock and Kim (2002) argued that self-efficacy could be treated as a major factor or a self-motivational source for knowledge. Moreover, an empirical study carried out by Hsu, Ju, Yen, and Chang (2007) demonstrated that self-efficacy has both direct and indirect effects on individual knowledge sharing behaviour, implying that self-efficacy plays a critical role in guiding this type of behaviour. More recently, studies conducted by Hau and Kang (2016), Yilmaz (2016), and Kang, Lee, & Kim (2017) found that self-efficacy is positively related to knowledge sharing behaviour in an e-learning context. In a study reported by Yoon and Rolland (2012), perceived competence influenced knowledge sharing behaviour in virtual communities. Hence, when employees believe that they are able to effectively perform a particular task by using and developing their skills and competences, they feel motivated and they might therefore perceive that this turns out positively for fellow workers' knowledge sharing behaviour. When employees identify themselves as members of a group or of a collective, they may be more energized than when they identify themselves as separate individuals (Ellemers et al., 2006). According to SDT, individuals are likely to strive to achieve group goals when they feel connected (Deci & Ryan, 2000). Indeed, in several knowledge sharing studies connectivity and relatedness are positively related to knowledge sharing behaviour (cf. Chiu, Hsu, & Wang, 2006; Yoon & Rolland, 2012). We argue that feeling connected with peers or team members can foster employees' motivation to share knowledge with others in the work context as they believe that efforts in fulfilling their own ambitions will benefit the team as a whole. In turn, employees might be more willing to share knowledge. In conclusion, we expect that when employees'

needs for autonomy, competence, and relatedness are satisfied, thus leading to greater self-determination, employees perceive more knowledge sharing behaviour among their peers. Therefore, we hypothesize the following:

Hypothesis 6. Satisfaction of employees' basic psychological need for autonomy (6a), competence (6b), and relatedness (6c) has a direct and positive relationship with employees' perceptions of sharing behaviour among peers.

Finally, we argue from a social exchange perspective that the relationship between individual employees and the organization can activate employees' knowledge sharing behaviours towards their peers by focusing on the extent to which an employee is self-determined. For example, perceived shared leadership support among peers and transformational leadership from the formal (team) leader may encourage self-determination on the part of employees, which increases their perceptions of knowledge sharing with each other. A study conducted by Cabrera et al. (2006) indicated that employees who perceived their co-workers and supervisors to value knowledge sharing were more inclined to engage in knowledge sharing behaviour themselves. In conclusion, if employees feel self-determinate through the encouragement of their peers (shared leadership) and the formal leader (transformational leadership), the individual employee will perceive that other fellow peers will mutually share knowledge, which will in turn strengthen the employee's knowledge sharing behaviour. The latter is important as knowledge workers in R&D-units generally participate simultaneously in different and often dispersed teams. In our research, we expect to find that both shared and transformational leadership can influence psychological needs satisfaction, which in turn enhances employees' perceptions of knowledge sharing among peers. We therefore formulate the following two mediation hypotheses:

Hypothesis 7. The positive relationship between shared leadership and employees' perception of knowledge sharing behaviour is mediated by the satisfaction of employees' basic psychological needs (for autonomy, competence, and relatedness).

Hypothesis 8. The positive relationship between transformational leadership and employees' perceptions of knowledge sharing behaviour is mediated by the satisfaction of employees' basic psychological needs (for autonomy, competence, and relatedness).

Figure 4.1 depicts the hypothesized relationships in the conceptual model.

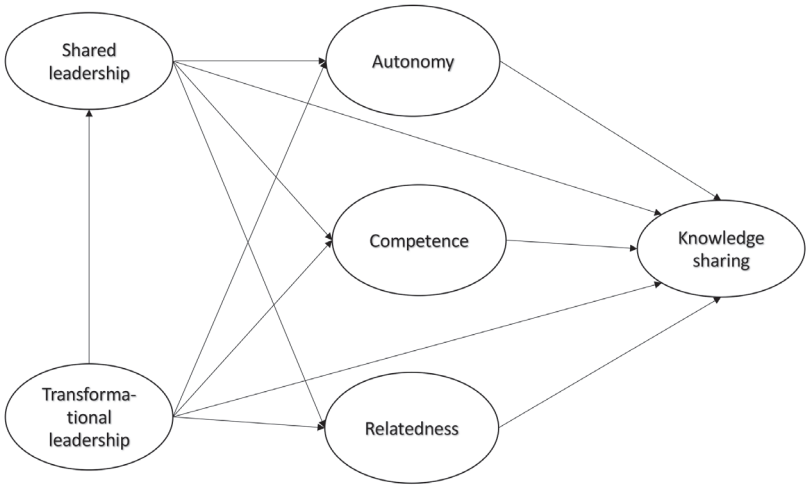


Figure 4. 1 Hypothesized conceptual model

4.3 Method

4.3.1 Data

Data were collected by means of a self-report questionnaire distributed to the entire population of 512 employees working in two R&D units of a knowledge-intensive firm operating in the Netherlands within the sector of foods for special medical purposes who have already adopted New Ways of Working. The knowledge workers in our study work in a team and project-based context with the opportunity and flexibility to work independently as regards to time and place. They often work in a virtual or distant setting, interacting with their colleagues using technological tools. Employees divide their time between multiple projects and are concurrently members of multiple teams which operate on a temporary or a permanent basis but which have a formally appointed supervisor. Their mutual collaboration suggests that they hold joint responsibility. Most workers are employed as project manager, technologist, researcher, or statistician. The response rate was 32% (163 respondents). Demographic information is summarized in Table 4.1. Overall, a small majority of the sample were female (60.1%). Most respondents were aged between 35 and 44 years (36.8%), and most respondents held a Master's degree (47.9).

4.3.2 Measures

All constructs in the research model are based on reflective multi-item scales. The instruments used for this study consisted of measures for the research constructs as

described below. We measured and analysed the constructs on the individual level of employees.

Table 4.1 Sample overview.

	Frequency	Percentage	Cumulative percentage
Gender			
Male	65	39.9	39.9
Female	98	60.1	100
Age			
18–24	13	8	8
25–34	54	33.1	41.1
35–44	60	36.8	77.9
45–54	28	17.2	95.1
55–64	7	4.3	99.4
65 or over	1	0.6	100
Education			
PhD degree	37	22.7	22.7
Master's degree	78	47.9	70.6
Bachelor's degree	39	23.9	94.5
High School	9	5.5	100

To measure individual employees' *perceptions of knowledge sharing among peers*, we used the knowledge sharing questionnaire developed by Staples and Webster (2008). The current study focuses on the individual knowledge workers' perceptions of the extent of knowledge sharing by fellow peers (cf. Srivastava, Bartol, & Locke, 2006). How do individual knowledge workers perceive that peers share their knowledge with others? Respondents were asked to rate their responses to five items on a seven-point Likert scale. One example of an item is the following: 'People in my team are willing to share knowledge/ideas with each other.'

To measure *psychological needs satisfaction* (PNS) for autonomy, competence, and relatedness, respectively, we adapted the five-point Likert scale used in the psychological needs satisfaction questionnaire developed and validated by Van den Broeck, Vansteenkiste, Witte, Soenens, and Lens (2010). Each construct consisted of six items. Items were formulated as statements such as: 'I really master my tasks at my job.'

To measure individual employees' perceptions of *transformational leadership* in their unit, we adapted the five-point Likert scale developed and validated by Hoch (2013). There were six items, formulated with statements such as: 'My leader is driven by higher purposes or ideals.'

Individual employees' perceptions of *shared leadership* were measured using an adapted seven-point Likert scale developed by Hiller, Day, and Vance (2006) and further validated by Shane Wood and Fields (2007). An example of the ten items is the following: 'Each member has a say in deciding how resources are allocated in regard to the team's priorities.'

4.3.3 Procedure

We used variance-based structural equation modelling (SEM) (Henseler, 2017), which (unlike covariance-based SEM) allows the predictive power of complex structural equation models to be estimated (Hair, Sarstedt, Ringle, & Guderman, 2017; Henseler, Hubona, & Ray, 2016). Because the nature of our research was explanatory, we also opted for variance-based equation modelling, which makes use of ordinary least squares (OLS) regressions (Hair, Sarstedt, Ringle, & Mena, 2012). Moreover, in variance-based structural equation modelling, partial least squares SEM (PLS-SEM) path modelling is the most fully developed system Hair, Ringle, & Sarstedt (2011), and it has been the subject of various reviews, discussions, and serious examinations (cf. Henseler, 2016). This has led to substantial contributions to and an increased robustness of PLS-SEM algorithms, including bootstrap-based tests of the overall model fit and consistent PLS-SEM to estimate factor models (Henseler, 2017). As such, PLS-SEM has become an important tool in a diverse range of disciplines, including information system research, strategic management, and marketing (for an extended overview, see Henseler, 2017).

We conducted PLS–SEM using SmartPLS version 3.2.3. (Ringle, Wende, & Will, 2015). For the partial least squares algorithm, we used the path weighting scheme. We set the maximum number of iterations at 300 and used 10^-5 as our stop criterion. We used a uniform value of 1 as the initial value for each of the outer weights (Henseler, 2010). In view of the rule of thumb provided by Barclay, Higgins, and Thompson (2005), suggesting the use of 10 times the maximum number of paths aiming at any construct in the outer and inner models, the sample size was considered acceptable. The items were based on a five-point Likert scale (except for the shared leadership items, which were based on a seven-point Likert scale) and could be interpreted as continuous variables, thus following the fundamental OLS principles.

4.4 Results

4.4.1 Model characteristics

For the outer model evaluation, we examined reliability and convergent validity. We checked reliability using the Nunnaly's (1978) Cronbach's Alfa threshold of 0.7. For convergent validity, we used Fornell and Larcker's (1981) criterion of an average variance extracted (AVE) for each construct above the 0.5 benchmark. All scales appeared to be reliable without removing an item, as illustrated in Table 4.2. After one item of 'PNS for Relatedness' and two items of 'PNS for Competence' had been removed, the model demonstrated sufficient convergent validity, the AVE for all constructs being above 0.50 (see Table 4.2). With the removal of the three items, reliability was maintained.

Table 4.2 Actual range, mean, standard deviation, reliability and AVE scores.

Construct	Actual range	Mean	*SD*	Cronbach's alpha	AVE
Knowledge sharing	3.60 – 7.00	5.13	0.56	0.80	0.65
Need for autonomy	1.33 – 5.00	3.61	0.64	0.88	0.54
Need for competence	2.17 – 5.00	4.01	0.56	0.85	0.60
Need for relatedness	1.80 – 5.00	3.88	0.69	0.89	0.62
Shared leadership	1.50 – 6.80	4.76	0.91	0.91	0.51
Transformational leadership	1.67 – 5.00	3.63	0.65	0.89	0.57

We subsequently examined indicator reliability. All factor loadings were above 0.60 and therefore acceptable (Hair, Hult, Ringle, & Sarstedt, 2014). Finally, we checked for discriminant validity, comparing the AVEs of the constructs with the inter-construct correlations determining whether each latent variable shared greater variance with its own measurement variables or with other constructs (Fornell & Larcker, 1981; Chin, 1998). We compared the square root of the AVE for each construct with the correlations with all other constructs in the model (Table 4.3). A correlation between constructs exceeding the square roots of their AVEs indicates that they may not be sufficiently discriminable. For each construct, we found that the absolute correlations did not exceed the square roots of the AVEs. Hence, we concluded that all constructs showed sufficient reliability and validity.

Table 4.3 Correlation coefficients and square roots of average variance extracted (AVE).

	KS	PNSA	PNSA	PNSC	SL	TL
Knowledge sharing (KS)	0.80					
Need for autonomy (PNSA)	0.41**	0.73				
Need for competence (PNSC)	0.08	0.37**	0.77			
Need for relatedness (PNSR)	0.34**	0.46**	0.35**	0.79		
Shared leadership (SL)	0.68**	0.38**	0.08	0.33**	0.72	
Transformational leadership (TL)	0.35**	0.38**	0.07	0.40**	0.45**	0.75

Note. ** $p < 0.01$ Diagonal numbers shown in boldface denote the square root of the average variance extracted (AVE) of each construct

4.4.2 Common-method variance

As this research was conducted using a self-administered survey method, we tested for common method variance (CMV) to evidence the absence of any systematic bias that might have influenced the collected data (Podsakoff, Mac Kenzie, Lee, & Podsakoff, 2003). We used a two-step approach. First, following Podsakoff and Organ (1986), we used Harman's (1976) one-factor test. Following this approach, we entered all principal constructs into one principal component factor analysis. Using SPSS software (SPSS version 22 for Windows), we applied the extraction method of principal component of one fixed factor with non-rotation method. Results showed the emergence of only one factor, and it explained less than 50% of the variance (27.32%), which gives a first indication of no CMV. Second, we used Bagozzi's method (Bagozzi, Yi, & Phillips, 1991), which stresses that CMV occurs when the highest correlation between constructs is more than 0.90. As shown in Table 4.3, the highest correlation between constructs is 0.68 (correlation between Knowledge Sharing and Shared Leadership). Therefore, it appears that there is no CMV in the collected data.

4.4.3 Model estimates

Regarding the inner model evaluation and estimates, we analysed the path coefficients by using bootstrap t-statistics for their significance (Anderson & Gerbing, 1988). For this bootstrapping, we used 5,000 subsamples, with a bias-corrected bootstrap, testing for a two-tailed significance of 95%. The model showed sufficient model fit: the standardized root mean square residual (SRMR) was 0.06, which is in line with Hu and Bentler's (1998) criterion of a value lower than 0.08.

4.4.4 Hypothesis testing

As summarized in Table 4.4, 'Shared Leadership' was found to have a direct relationship with 'Knowledge Sharing' (γ = 0.60, p = 0.00, R^2 = 0.49). Together with a high effect size (f^2) of 0.51, there is strong support for Hypothesis 1. 'Transformational Leadership' was not found to have a relationship with 'Knowledge Sharing' (γ = -0.01, p = 0.86). Hence, there is no support for Hypothesis 2.

Table 4.4 Structural relationships with R^2, predicting power ($f2$) and path coefficients (γ)

Constructs*	R^2	f^2 values	Coefficient (γ)	T statistics	p values	Hypothesis tested
SL → KS	0.49	0.51	0.60	8.62	0.00	1
TL → KS			-0.01	0.18	0.86	2
TL → SL	0.20	0.25	0.46	5.68	0.00	3
SL → PNSA	0.20	0.07	0.25	3.41	0.00	4a
SL → PNSC			0.07	0.51	0.61	4b
SL → PNSR	0.19	0.04	0.20	2.24	0.03	4c
TL → PNSA	0.20	0.07	0.27	3.25	0.00	5a
TL → PNSC			0.02	0.31	0.76	5b
TL → PNSR	0.19	0.10	0.33	3.82	0.00	5c
PNSA → KS	0.49	0.04	0.17	2.44	0.01	6a
PNSC → KS			-0.06	0.85	0.39	6b
PNSR → KS			-0.09	1.21	0.23	6c

Note. * PNSA= Psychological Need Satisfaction for Autonomy; PNSC = Psychological Need Satisfaction for Competence; PNSR = Psychological Need Satisfaction for Relatedness; KS = Knowledge Sharing; SL = Shared Leadership; TL = Transformational Leadership.

However, 'Transformational Leadership' was found to have a direct relationship with 'Shared Leadership' (γ = 0.46, p = 0.00, R^2 = 0.20) and a medium effect size (f^2) of 0.25. This means that there is also support for Hypothesis 3. 'Shared Leadership' was found to have a weak relationship with 'PNS for Autonomy' (γ = 0.25, p = 0.00, R^2 = 0.20, f^2 = 0.07), a weak relationship with 'PNS for Relatedness' (γ = 0.20, p = 0.03, R^2 = 0.19, f^2 = 0.04) and no relationship with 'PNS for Competence' (γ = 0.07, p = 0.61), and as such provides low support for Hypothesis 4. 'Transformational Leadership' was found to have a relationship with 'PNS for Autonomy' (γ = 0.27, p = 0.00, R^2 = 0.20) but a weak effect size (f^2) of 0.07. The construct 'Transformational Leadership' was found to have an average relationship with 'PNS for Relatedness' (γ = 0.33, p = 0.00, R^2 = 0.19, f^2 = 0.10); 'Transformational Leadership' was not found to have a relationship with 'PNS for Competence' (γ = 0.02, p

= 0.76), and as such provides partial support for Hypothesis 5. 'PNS for Autonomy' was found to have a relationship with 'Knowledge Sharing' (γ = 0.17, p = 0.01, R^2 = 0.49) but a partial effect size (f^2) of 0.04. 'PNS for Competence' was not found to have a relationship with 'Knowledge Sharing' (γ = -0.06, p = 0.39). In addition, 'PNS for Relatedness' was not found to have a relationship with 'Knowledge Sharing' (γ = -0.09, p = 0.23). This supports the conclusion that 'PNS' as such has a weak effect on 'Knowledge Sharing' and provides partial support for Hypothesis 6. Significant indirect effects were found (γ = 0.06, p = 0.03, R^2 = 0.49) to support mediation of PNS in the relationship between 'Shared Leadership' and 'Knowledge Sharing'. This suggests mediation via 'PNS for Autonomy', which was found to have a significant direct effect only on 'Knowledge Sharing' (γ = 0.17, p = 0.01) and as such provides low support for Hypothesis 7.

Together with demonstrating indirect effects of 'Transformational Leadership' on 'PNS for Autonomy' (γ = 0.13, p = 0.01) via 'Shared Leadership', and in view of only a significant direct effect of 'PNS for Autonomy' of all three PNS variables on 'Knowledge Sharing' (γ = 0.17, p = 0.01), the results suggest weak but significant indirect effects, which supports full mediation via 'PNS for Autonomy' and as such provides partial support for Hypothesis 8.

4.5 Discussion and theoretical contributions

The aim of the present study was to contribute to the literature by using social-exchange and self-determination theory to examine how both transformational leadership and shared leadership may directly contribute to employees' perceptions to engage in knowledge sharing behaviour among peers, or may do so indirectly via employees' basic psychological needs satisfaction. The main outcomes and contributions of this research are summarized and discussed below.

4.5.1 The direct and indirect effects of leadership on employees' perceptions of knowledge sharing behaviour among peers

First, we found a strong positive direct effect of shared leadership on the perceptions of employees' knowledge sharing behaviour among peers. More concretely, under the condition of shared leadership, employees seem to be willing to share their ideas with their peers more frequently. This condition of shared responsibilities enhances employees' trust and ensures that they take responsibility for their work that requires knowledge sharing. Employees hold each other accountable and expect a reciprocity in knowledge

sharing in order to successfully perform their increasingly complex and sophisticated tasks. Those results expands previous results shown by Lee et al. (2015) and Han et al. (2017).

Second, in contrast to prior studies which have suggested that transformational leadership has a direct and positive effect on knowledge sharing, we did not find a direct effect of transformational leadership on the perception of knowledge sharing behaviour. However, we did find an indirect effect of transformational leadership on knowledge sharing via shared leadership. Shared leadership encouraged by transformational leadership is important in stimulating knowledge sharing, although the influence of shared leadership exceeded that of transformational leadership when it comes to fostering knowledge sharing. Nevertheless, our study confirms our assumption that a formal leader's transformational leadership style is needed as it can enhance shared leadership and, ultimately, fuel employees' perceptions of knowledge sharing behaviour among peers. In addition, our study confirms the interrelatedness of transformational and shared leadership; this is in line with prior research by Hoch (2013), who found that transformational leadership was an important predictor of shared leadership. Nevertheless, our study was the first to show the indirect effect of transformational leadership via shared leadership on employees' perceptions of knowledge sharing behaviour among peers. Despite the growing importance of self-management and shared leadership, transformational leadership plays a role by stimulating shared leadership and by generating trust and confidence in employees' reciprocity, resulting in the willingness to share their knowledge with others.

4.5.2 The mediating role of basic psychological needs satisfaction in the relationship between leadership and employees' perceptions of knowledge sharing behaviour among peers

Our study also focused on the role of employees' self-determination through basic psychological needs satisfaction, as an explanatory mechanism underlying the relationship between shared and transformational leadership and knowledge sharing behaviour.

First, we found a mediating effect for the need for autonomy for both shared and transformational leadership. This result demonstrates that shared and transformational leadership are positively associated with psychological need satisfaction for autonomy, which enhances employees' perceptions of knowledge sharing among peers. The result found for the mediation effect for the need for autonomy expands what we know from the SDT literature, as this need for autonomy is seen as the most important element in

determining the degree of intrinsic motivation achieved (Deci, Olafsen, & Ryan, 2017; Gagne & Deci, 2005). Furthermore, our mediation analyses revealed that there may be two additional indirect pathways (besides the direct pathway of shared leadership on knowledge sharing, as discussed above) to stimulate employees to engage in employees' perceptions of knowledge sharing behaviour. Especially in a contemporary workplaces where knowledge workers often work virtually or remotely, with the freedom to work when and where they want, the need for autonomy might be important for creating some form of control in order to function. A study by Van Yperen, Wortler, and De Jonge (2016) showed that only workers who have a strong need for autonomy may feel that working in a flexible work context (with the discretion to decide when and where to work) fits them well. We might assume that in an R&D context where employees often work virtually or remotely and who split their time between multiple projects simultaneously, it is important that their colleagues and their peers as well as their formal team leader encourage knowledge workers, so that they may experience that their need for autonomy is satisfied. In turn, this feeling of being autonomous and self-determinate is important for the perception of the willingness of knowledge sharing behaviour among fellow employees. In this regard, the process involving the fulfilment of the need for autonomy can be seen as an exchange process (Blau, 1964). The perceived shared leadership support among peers combined with transformational leadership from the formal (team) leader encourages self-determination on the part of the employee, which increases employees' perceptions of the usefulness of knowledge sharing with each other. In our opinion, although employees may be psychologically empowered, formal leaders and peers remain important actors to satisfy individuals' need for autonomy, and in turn to enhance employees' perceptions of knowledge sharing among peers.

Second, in contrast with our expectations, we did not find a mediation effect for psychological needs satisfaction for relatedness, although a positive trend could be seen from both shared and transformational leadership towards the satisfaction of this need. It seems that leadership can generate an atmosphere of trust that enhances employees' individual feelings of belongingness. As trust and psychological safety may not always be present in contemporary workplaces, peers and formal leaders definitely have a role to play, namely by sharing leadership responsibilities and engaging in transformational leadership, respectively (Siemsen, Roth, Balasubramanian, & Anand, 2009). However, this is insufficient for believing that fellow peers will share knowledge, particularly in view of the non-significant relationship between relatedness satisfaction and knowledge sharing.

Third, we could not find a mediation effect for psychological needs satisfaction with respect to competence: neither shared leadership nor transformational leadership significantly affected competence satisfaction. Still, transformational leaders are

traditionally seen as having the ability to motivate their employees to develop skills and knowledge so that they can respond to various challenges (Bass, 1985; 1990), which in turn may enhance competence satisfaction. The lack of significant relationships between leadership and competence satisfaction as revealed in this research might be explained by the fact that especially R&D knowledge workers have their own specializations and competences (Carodi et al., 2015). Due to the high degree of specialization demonstrated by the professionals in our sample, employees may not necessarily need to learn new competences from their formal leader or peer colleagues, but rather learn these by attending external training and education programmes. Furthermore, we did not find a relationship between competence satisfaction and knowledge sharing. It is possible that competent employees do not always engage in knowledge sharing, as they fear it may diminish or undermine their own power and career opportunities. Especially knowledge workers in competitive contexts may want to control and enhance their career potential to ensure their own lifelong employment and personal career success (Van der Heijden, Peters, & Kelliher, 2014). In addition, employees who do not identify sufficiently with the organization and their peers may fail to experience the exchange of knowledge sharing among fellow peers (Koriat & Gelbard, 2014). Finally, the increase in teamwork that characterizes contemporary workplaces may call for team-based reward systems to promote knowledge sharing in order to achieve common goals and improve team performance (Peters, Ligthart, Bardoel, & Poutsma, 2016). As in our case organization the rewarding of employees was based on individual performance, this may inhibit knowledge sharing (Garbers & Konradt, 2014; Foss, Pedersen, Fosgaard, & Stea, 2015).

4.6 Limitations and avenues for future research

The current study has a number of limitations and some new directions for further research.

First, since we used a cross-sectional design, the dynamic interplay between shared and transformational leadership could not be studied, which precluded the determination of causal relationships. Consequently, we were unable to comment on the dynamic interaction between those two leadership approaches and their association with employees' perceptions of knowledge sharing behaviour with peers. We encourage future researchers to conduct a longitudinal study of these relationships by using a sample of employees to be investigated at different development and lifecycle stages. Moreover, additional qualitative data could provide more information and deeper insights into the relationship particularly between shared leadership and knowledge sharing and the role of employees' self-determination. Most commonly, studies on leadership are conceptual by nature, or they employ surveys.

Second, despite the significant and positive relationships that were found to exist between leadership and knowledge sharing, our research focused particularly on R&D professionals operating within the context of a single organization active in the sector of foods for special medical purposes. This approach enabled us to cover an interesting group of professional R&D knowledge workers in one case study. Additional empirical investigations are needed in other business units of this particular organization as well as within other organizations and knowledge-intensive sectors, so that the results can be generalized.

Third, we investigated the role of shared and transformational leadership in fostering knowledge sharing behaviour among peers, but we cannot exclude the effects on such knowledge sharing that may be exerted by other variables such as culture and incentive systems. Future studies could explore the impact and role of other variables on knowledge sharing.

Finally, in this study, we were interested in the individual perceptions of the employed knowledge workers themselves, in terms of how they perceive the sharing of leadership responsibilities and activities as well as how they perceive knowledge sharing among (or on behalf of) their peer colleagues. Given the purpose of this study, aggregation to other levels was not deemed necessary. Still, future research might want to focus on examining identification with the group or organization at individual as well group levels while exploring the respective relationships with other group level variables.

4.7 Management implications

Our findings have a number of implications for organizations, managers, team leaders, and employees in contemporary workplaces.

First, contemporary workplaces can be increasingly characterized as flat organizations with team-based structures and self-managing teams in which employees can and are expected to effectively manage themselves. However, shared leadership, embedded in and encouraged by the transformational leadership of formal (team) leaders, is most important in helping employees create trust that is conducive to sharing responsibilities and activities which promote knowledge sharing. This is especially true for knowledge workers, who often work in distributed teams and split their time between multiple projects simultaneously - situations in which knowledge sharing can be disrupted or fragmented. Building awareness of the importance of shared and transformational leadership in particular necessitates the training and development of leaders and employees alike, and this should be incorporated into HR development programs.

Second, fellow knowledge workers as well as formal leaders have a crucial role in strengthening shared leadership capacities and in enhancing employees' self-determination, which in turn can create confidence and lead to increased willingness to engage in knowledge sharing behaviour in the workplace. This may be pertinent not only for maintaining a healthy and productive work context for employees, but also for attracting and retaining talent (Ehnert, 2014).

Finally, our results also imply that in knowledge-intensive environments both peers and formal leaders can play an important role in giving employees a sense of autonomy and in strengthening both their identification with the organization and their belongingness. This may have important consequences for managers as well as employees who seek to implement particular types of rationalities within their team-based organizations.

References

Allen, S. A., & Ofahengaue Vakalahi, H. F. (2013). My team members are everywhere! A critical analysis of the emerging literature on dispersed teams. *Administration in Social Work*, *37*(5), 486-493.

Alsharo, M., Gregg, D., & Ramirez, R. (2017). Virtual team effectiveness: The role of knowledge sharing and trust. *Information & Management*, *54*(4), 479-490.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modelling in practice: A review and recommended two-step approach. *Psychological Bulletin*, *103*(3), 411-423.

Argote, L., & Ingram, P. (2000). Knowledge transfer: A basis for competitive advantage in firms. *Organizational Behavior and Human Decision Processes*, *82*(1), 150-169.

Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing construct validity in organizational research. *Administrative Science Quarterly*, *36*(3), 421-458.

Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology, 4*(3), 359-373.

Barclay, D., Higgins, C., & Thompson, R. (1995). The Partial Least Squares (PLS) Approach to Causal Modelling: Personal Computer Adoption and Use as an Illustration. *Technology Studies, 2*(2), 285-309.

Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press, Collier Macmillan.

Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, *18*(3), 19-31.

Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, *88*(2), 207-218.

Bass, B. M., & Riggio, R. E. (2006). *Transformational l*eadership (2nd ed.). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.

Bass, B. M., & Riggio, R. E. (2010). The transformational model of leadership. In G. R. Hickman (Ed.), *Leading organizations: Perspectives for a new era,* (2nd ed.) (pp. 76–86). Thousand Oaks, CA: Sage.

Blau, P. (1964). *Exchange and Power in Social Life*. New York: Wiley.

Bock, G.W., & Kim, Y.G. (2002). Breaking the myths of rewards: an exploratory study of attitudes about knowledge sharing. *Information Resources Management Journal*, *14*, 14-21.

Bock, G. W., Zmud, R. W., Kim, Y. G., & Lee, J. N. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS Quarterly*, *29*(1), 87-111. (Special issue on Information Technologies and Knowledge Management)

Bryant, S. E. (2003). The role of transformational and transactional leadership in creating, sharing and exploiting organizational knowledge. *Journal of Leadership & Organizational Studies*, *9*(4), 32-44.

Cabrera, A., Collins, W. C., & Salgado, J. F. (2006). Determinants of individual engagement in knowledge sharing. *The International Journal of Human Resource Management*, *17*(2), 245-264.

Carson, J. B., Tesluk, P. E., & Marrone, J. A. (2007). Shared leadership in teams: An investigation of antecedent conditions and performance. *Academy of Management Journal*, *50*(5), 1217-1234.

Chin, W. W. (1998). The partial least squares approach to structural equation modelling. *Modern methods for Business Research*, *295*(2), 295-336.

Chiu, C. M., Hsu, M. H., & Wang, E. T. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision Support Systems*, *42*(3), 1872-1888.

Cohen, J. (1992). A power primer. *Psychological Bulletin*, *112*(1), 155-159.

Coradi, A., Heinzen, M., & Boutellier, R. (2015). Designing workspaces for cross-functional knowledge-sharing in R & D: the "co-location pilot" of Novartis. *Journal of Knowledge Management*, *19*(2), 236-256.

Coun, M. J. H., Gelderman, C. J., & Pérez Arendsen, J. (2015). Shared leadership and proactivity in New Ways of Working (In Dutch: Gedeeld leiderschap en proactiviteit in Het Nieuwe Werken). *Gedrag & Organisatie*, *28*(4), 356-379.

Cummings J.N. (2004). Work groups, structural diversity, and knowledge sharing in a global organization. *Management Science*, *50*, 352-364.

Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-determination theory in work organizations: The state of a science. *Annual Review of Organizational Psychology and Organizational Behavior*, *4*, 19-43.

Deci, E. L., & Ryan, R. M. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, *25*(1), 54-67.

De Cooman, R., Stynen, D., Van den Broeck, A., Sels, L., & De Witte, H. (2013). How job characteristics relate to need satisfaction and autonomous motivation: Implications for work effort. *Journal of Applied Social Psychology*, *43*(6), 1342-1352.

De Paoli, D., & Ropo, A. (2015). Open-plan offices-the response to leadership challenges of virtual project work? *Journal of Corporate Real Estate*, *17*(1), 63-74.

Dong, Y., Bartol, K. M., Zhang, Z. X., & Li, C. (2017). Enhancing employee creativity via individual skill development and team knowledge sharing: Influences of dual-focused transformational leadership. *Journal of Organizational Behavior*, *38*(3), 439-458.

Ehnert, I. (2014). Paradox as a lens for theorizing sustainable HRM. Mapping and coping with paradoxes and tensions. In I. Ehnert, W. Harry, & K. J. Zink (Eds.), *Sustainability and human resource management: Developing sustainable business organizations* (pp. 247-272). Heidelberg: Springer.

Ellemers, N., De Gilder, D., & Haslam, S. A. (2004). Motivating individuals and groups at work: A social identity perspective on leadership and group performance. *Academy of Management Review*, *29*(3), 459-478.

Ellison, N. B., Gibbs, J. L., & Weber, M. S. (2015). The use of enterprise social network sites for knowledge sharing in distributed organizations the role of organizational affordances. *American Behavioral Scientist*, *59*(1), 103-123.

Fausing, M. S., Joensson, T. S., Lewandowski, J., & Bligh, M. (2015). Antecedents of shared leadership: empowering leadership and interdependence. *Leadership & Organization Development Journal*, *36*(3), 271-291.

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, *18*(3), 328-388.

Foss, N. J., Pedersen, T., Reinholt Fosgaard, M., & Stea, D. (2015). Why Complementary HRM Practices Impact Performance: The Case of Rewards, Job Design, and Work Climate in a Knowledge-Sharing Context. *Human Resource Management*, *54*(6), 955-976.

Gagné, M. (2009). A model of knowledge-sharing motivation. *Human Resource Management*, *48(4)*, 571–589.

Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, *26*(4), 331-362.

Garbers, Y., & Konradt, U. (2014). The effect of financial incentives on performance: A quantitative review of individual and team-based financial incentives. *Journal of Occupational and Organizational Psychology, 87*(1), 102-137.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks: Sage.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, *19*(2), 139-152.

Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., & Thiele, K. O. (2017). Mirror, mirror on the wall: a comparative evaluation of composite-based structural equation modeling methods. *Journal of the Academy of Marketing Science*, *45*(5), 616 -632.

Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, *40*(3), 414-433.

Han, S. H., Seo, G., Li, J., & Yoon, S. W. (2016). The mediating effect of organizational commitment and employee empowerment: how transformational leadership impacts employee knowledge sharing intention. *Human Resource Development International*, *19*(2), 98-115.

Han, S. J., Lee, Y., Beyerlein, M., & Kolb, J. (2018). Shared leadership in teams: The role of coordination, goal commitment, and knowledge sharing on perceived team performance. *Team Performance Management: An International Journal*, *24*(3/4), 150-168. http://doi.org/10.1108/TPM-11-2016-0050

Harman, H. H. (1976). *Modern factor analysis*. Chicago: University of Chicago Press.

Hau, Y. S., & Kang, M. (2016). Extending lead user theory to users' innovation related knowledge sharing in the online user community: the mediating roles of social capital and perceived behavioral control. *International Journal of Information Management*, *36*(4), 520-530.

Henseler, J. (2010). On the convergence of the partial least squares path modelling algorithm. *Computational Statistics*, *25*(1), 107-120.

Henseler, J. (2017). Bridging design and behavioral research with variance-based structural equation modelling. *Journal of Advertising*, *46*(1), 178-192.

Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modelling in new technology research: updated guidelines. *Industrial Management & Data Systems*, *116*(1), 2-20.

Hetland, J., Hetland, H., Bakker, A. B., Demerouti, E., Andreassen, C. S., & Pallesen, S. (2015). Psychological need fulfilment as a mediator of the relationship between transformational leadership and positive job attitudes. *Career Development International*, *20*(5), 464-481.

Hiller, N. J., Day, D. V., & Vance, R. J. (2006). Collective enactment of leadership roles and team effectiveness: A field study. *The Leadership Quarterly*, *17*(4), 387-397.

Hoch, J. E. (2013). Shared leadership and innovation: The role of vertical leadership and employee integrity. *Journal of Business and Psychology*, *28*(2), 159-174.

Hoch, J. E. (2014). Shared leadership, diversity, and information sharing in teams. *Journal of Managerial Psychology*, *29*(5), 541-564.

Houghton, J. D., Pearce, C. L., Manz, C. C., Courtright, S., & Stewart, G. L. (2015). Sharing is caring: Toward a model of proactive caring through shared leadership. *Human Resource Management Review*, *25*(3), 313-327.

Houghton, J.D., Neck, C.P., & Manz, C.C. (2003a). Self-leadership and super-leadership: the heart and art of creating shared leadership in teams. In C. L. Pearce, & J. A. Conger (Eds.), *Shared Leadership: Reframing the Hows and Whys of Leadership*, pp. 123-140. Thousand Oaks: CA. Sage Publications.

Hu, L. T., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to under-parameterized model misspecification. *Psychological Methods*, *3*(4), 424-453.

Hsu, M. H., Ju, T. L., Yen, C. H., & Chang, C. M. (2007). Knowledge sharing behavior in virtual communities: The relationship between trust, self-efficacy, and outcome expectations. *International Journal of Human-Computer Studies*, *65*(2), 153-169.

Kang, M., & Lee, M. J. (2017). Absorptive capacity, knowledge sharing, and innovative behaviour of R&D employees. *Technology Analysis & Strategic Management*, *29*(2), 219-232.

Kang, Y. J., Lee, J. Y., & Kim, H. W. (2017). A psychological empowerment approach to online knowledge sharing. *Computers in Human Behavior, 74*, 175-187.

Koriat, N., & Gelbard, R. (2014). Knowledge sharing motivation among IT personnel: Integrated model and implications of employment contracts. *International Journal of Information Management*, *34*(5), 577-591.

Kovjanic, S., Schuh, S. C., & Jonas, K. (2013). Transformational leadership and performance: An experimental investigation of the mediating effects of basic needs satisfaction and work engagement. *Journal of Occupational and Organizational Psychology*, *86*(4), 543-555.

Lagerström, K., & Andersson, M. (2003). Creating and sharing knowledge within a transactional team – The development of a global business system. *Journal of World Business*, *38*(2), 84–95.

Lee, H., & Choi, B. (2003). Knowledge management enablers, processes, and organizational performance: An integrative view and empirical examination. *Journal of Management Information Systems*, *20*(1), 179-228.

Lee, D. S., Lee, K. C., & Seo, Y. W. (2015). An analysis of shared leadership, diversity, and team creativity in an e-learning environment. *Computers in Human Behavior*, *42*, 47-56.

Llopis, O., & Foss, N. J. (2016). Understanding the climate–knowledge sharing relation: The moderating roles of intrinsic motivation and job autonomy. *European Management Journal*, *34*(2), 135-144.

Lohmöller, J. B. (1989). *Latent Variable Path Modeling with Partial Least Squares*. Heidelberg: Physica-Verlag.

Luo, X. (2002). Trust production and privacy concerns on the Internet: A framework based on relationship marketing and social exchange theory. *Industrial Marketing Management*, *31*(2), 111-118.

Mabey, C., & Zhao, S. (2017). Managing five paradoxes of knowledge exchange in networked organizations: new priorities for HRM? *Human Resource Management Journal*, *27*(1), 39-57.

Mueller, J. (2014). A specific knowledge culture: Cultural antecedents for knowledge sharing between project teams. *European Management Journal*, *32*(2), 190-202.

Neck, C. P. Houghton, J. D., Sardeshmukh, S. R., Goldsby, M., & Godwin, J. L. (2013). Self-leadership: A cognitive resource for entrepreneurs. *Journal of Small Business & Entrepreneurship*, *26*(5), 463-480.

Nunnally, J. C. (1978). *Psychometric theory (2nd edition)*. New York: McGraw-Hill.

O'Neill, T. A., Hambley, L. A. & Chatellier, G. S. (2014). Cyberslacking, engagement, and personality in distributed work environments. *Computers in Human Behavior*, *40*, 152-160.

Park, H., Ribière, V., & Schulte Jr, W. D. (2004). Critical attributes of organizational culture that promote knowledge management technology implementation success. *Journal of Knowledge Management, 8*(3), 106-117.

Pearce, C. L. (2004). The future of leadership: Combining vertical and shared leadership to transform knowledge work. *The Academy of Management Executive*, *18*(1), 47-57.

Pearce, C.L., & Conger, J.A. (2003). Shared leadership: Reframing the Hows and Whys of Leadership Thousand Oaks, CA: Sage.

Peters, P., Den Dulk, L., & Van der Lippe, T. (2009). The effects of time-spatial flexibility and new working conditions on employees' work-life balance: The Dutch case. *Community, Work & Family*, *12*(3), 279–98.

Peters, P., Ligthart, P. E., Bardoel, A., & Poutsma, E. (2016). 'Fit for telework'? Cross-cultural variance and task-control explanations in organizations' formal telework practices. *The International Journal of Human Resource Management*, *27*(21), 2582-2603.

Peters, P., Poutsma E., Van der Heijden B. I. J. M, Bakker A.P., & De Bruijn, A. (2014). Enjoying new ways to work: An HRM-process approach to study flow. *Human Resource Management*, *53,* 271–290.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879.

Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, *12*(4), 531-544.

Purvanova, R. K., & Bono, J. E. (2009). Transformational leadership in context: Face-to-face and virtual teams. *The Leadership Quarterly*, *20*(3), 343-357.

Reinholt, M. I. A., Pedersen, T., & Foss, N. J. (2011). Why a central network position isn't enough: The role of motivation and ability for knowledge sharing in employee networks. *Academy of Management Journal*, *54*(6), 1277-1297.

Ringle, C. M., Wende, S., & Becker, J.M. (2015). *SmartPLS 3.* Boenningstedt: SmartPLS GmbH. Retrieved November 6, 2018 from: http://www.smartpls.com

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*(1), 68-78.

Shane Wood, M., & Fields, D. (2007). Exploring the impact of shared leadership on management team member job outcomes. *Baltic Journal of Management*, *2*(3), 251-272.

Siemsen, E., Roth, A. V., Balasubramanian, S., & Anand, G. (2009). The influence of psychological safety and confidence in knowledge on employee knowledge sharing. *Manufacturing & Service Operations Management*, *11*(3), 429-447.

Spreitzer, G. M., Cameron, L., & Garrett, L. (2017). Alternative Work Arrangements: Two Images of the New World of Work. *Annual Review of Organizational Psychology and Organizational Behavior*, *4*(1), 473-499.

Srivastava, A., Bartol, K. M., & Locke, E. A. (2006). Empowering leadership in management teams: Effects on knowledge sharing, efficacy, and performance. *Academy of Management Journal*, *49*(6), 1239-1251.

Staples, D. S., & Webster, J. (2008). Exploring the effects of trust, task interdependence and virtualness on knowledge sharing in teams. *Information Systems Journal*, *18*(6), 617-640.

Van den Broeck, A., Vansteenkiste, M., De Witte, H., & Lens, W. (2008). Explaining the relationships between job characteristics, burnout, and engagement: The role of basic psychological need satisfaction. *Work & Stress*, *22*(3), 277-294.

Van den Broeck, A., Vansteenkiste, M., Witte, H., Soenens, B., & Lens, W. (2010). Capturing autonomy, competence, and relatedness at work: Construction and initial validation of the Work-related Basic Need Satisfaction scale. *Journal of Occupational and Organizational Psychology, 83*(4), 981-1002.

Van der Heijden, B. I. J. M., Peters, P., & Kelliher, C. (2014). New ways of working and employability. Towards an agenda for HRD. In R.F. Poell, T.S. Rocco, & G.L. Roth (Eds.), *The Routledge Companion to Human Resource Development* (pp. 542-551). London, UK: Routledge.

Van Yperen, N. W., Wörtler, B., & De Jonge, K. M. (2016). Workers' intrinsic work motivation when job demands are high: The role of need for autonomy and perceived opportunity for blended working. *Computers in Human Behavior*, *60*, 179-184.

Wageman, R., Gardner, H., & Mortensen, M. (2012). The changing ecology of teams: New directions for team research. *Journal of Organizational Behavior*, *33*(3), 301-315.

Wang, W. T., & Hou, Y. P. (2015). Motivations of employees' knowledge sharing behaviors: A self-determination perspective. *Information and Organization*, *25*(1), 1-26.

Wang, S., & Noe, R. A. (2010). Knowledge sharing: A review and directions for future research. *Human Resource Management Review*, *20*(2), 115-131.

Wang, G., Oh, I. S., Courtright, S. H., & Colbert, A. E. (2011). Transformational leadership and performance across criteria and levels: A meta-analytic review of 25 years of research. *Group & Organization Management*, *36*(2), 223-270.

Wang, Z., Sharma, P. N., & Cao, J. (2016). From knowledge sharing to firm performance: A predictive model comparison. *Journal of Business Research*, *69*(10), 4650–4658.

Wang, D., Waldman, D. A., & Zhang, Z. (2014). A meta-analysis of shared leadership and team effectiveness. *Journal of Applied Psychology*, *99*(2), 181-198. http:// doi:10.1037/a0034531

Xiao, Y., Zhang, X., & Ordóñez de Pablos, P. (2017). How does individuals' exchange orientation moderate the relationship between transformational leadership and knowledge sharing. *Journal of Knowledge Management*, *21*(6), 1622-1639.

Yilmaz, R. (2016). Knowledge sharing behaviors in e-learning community: Exploring the role of academic self-efficacy and sense of community. *Computers in Human Behavior*, *63*, 373-382.

Yoon, C., & Rolland, E. (2012). Knowledge-sharing in virtual communities: familiarity, anonymity and self-determination theory. *Behaviour & Information Technology*, *31*(11), 1133-1143.

Zhu, W., Avolio, B. J., & Walumbwa, F. O. (2009). Moderating role of follower characteristics with transformational leadership and follower work engagement. *Group & Organization Management, 34*(5), 590-619.

CHAPTER 5

‘To empower or not to empower, that’s the question’: Using an empowerment process approach to explain employees’ workplace proactivity in NWW contexts

A preliminary part of this chapter is published as Coun, M.J.H., Peters, P., Blomme, R. J., & Schaveling, J. (2018). An extended empowerment process approach to proactivity: the role of flexible work arrangements and empowering leadership. *Academy of Management Proceedings*, 1, 14842. An adapted additional version is accepted for publication: Coun, M.J.H., Peters, P., Blomme, R.J., & Schaveling, J. (in press). ‘To empower or not to empower, that’s the question’. Using an empowerment approach to explain employees’ workplace proactivity. *The International Journal of Human Resource Management. https://doi.org/10.1080/09585192.2021.1879204*

Summary

The study investigates to what extent empowering HRM practices (i.e., workplace flexibility, professional autonomy, and access to knowledge via ICT) and empowering leadership have the potential to motivate employees in displaying workplace proactivity in NWW context. The study builds on the empowerment theory to gain a better understanding of how supervisors or managers, and employees able to make choices to achieve the goals set in their work and how leadership can support this. A field study was conducted in four subsidiaries of a large Dutch bank active in the financial sector in the Netherlands which has made the transformation to self-managing teams with greater autonomy. In line with expectations, positive relationships were found between professional autonomy, access to knowledge via ICT and empowering leadership, on the one hand, and psychological empowerment, on the other. Also, in line with expectations, a positive relationship was found between psychological empowerment and workplace proactivity. Moreover, as hypothesized, psychological empowerment partly mediated the relationship between the HRM practices and empowering leadership and workplace proactivity. However, autonomy had a direct, negative effect on workplace proactivity. Also workplace flexibility was neither directly nor indirectly associated with workplace proactivity. Finally, HRM and leadership can be viewed as complementary as they combine different perspectives for employees in order to display proactive workplace behaviour. In conclusion, the empowerment process approach helped to disentangle the motivating elements that foster workplace proactivity in modern workplaces.

5.1 Introduction

Organizations are increasingly implementing new ways of working in their response to the agile and dynamic work environment pushed by new technologies, artificial intelligence, and digitalization. In order to enhance organizational agility in highly unpredictable and complex markets, employees' workplace proactivity has become more and more a necessity (Binyamin & Brender-Ilan, 2018). Workplace proactivity refers to employees' ability to take self-directed action to anticipate changes in their work and to respond to future possibilities instead of undergoing developments passively (Crant, 2000). However, workplace proactivity is not something that happens automatically; employees must be abled, motivated, and given the opportunity to enact specific workplace proactivity in the workplace (Appelbaum, Bailey, Berg, Kalleberg, & Bailey, 2000; Parker & Wu, 2014).

Over the past decades, many organizations have established empowering Human Resource Management (HRM) practices that are based on trust and that are assumed to motivate employees by offering and sharing autonomy, workplace flexibility, and providing access to information via ICT (Peters, Poutsma, Van der Heijden, Bakker, & Bruijn, 2014). These empowering HRM practices can comprise flexible work arrangements known as New Ways of Working (NWW) (cf. Gerdenitsch, Kubicek, & Korunka, 2015; Van der Heijden, Peters, & Kelliher, 2014). NWW offers workers electronic tools and information and communication technologies (ICT) which enable them to share their knowledge with peers inside and outside their organizations (Coun, Peters, & Blomme, 2019; Ten Brummelhuis, Bakker, Hetland, & Keulemans, 2012). Empowering HRM practices can enhance employees' autonomous work motivation, which in turn can foster workplace proactivity and thus the generation of creative and innovative ideas. However, studies that linked the HRM system or HRM practices to workplace proactivity (e.g., Arefin, Arif, & Raquib, 2015; Batistič, Černe, Kaše, & Zupic, 2016; Chen, Lyu, Li, Zhou, & Li, 2017) mainly focused on practices such as selection, training, and reward systems which can be used to monitor and indirectly control people (Peters, Ligthart, Bardoel, & Poutsma, 2016) rather than on HRM practices which can be expected to motivate employees. Therefore, more empirical evidence is needed to determine how single empowering HRM practices (i.e., workplace flexibility, professional autonomy, and access to knowledge via ICT) can encourage workplace proactivity in an NWW context, and to determine what the underlying mechanisms are.

In addition to empowering HRM practices, empowering leadership may also play a role in encouraging workplace proactivity (Parker, Bindl, & Strauss, 2010; Parker & Wu, 2014). NWW and remote working often require leadership to shift from direct supervision and

top-down control to more indirect forms of leadership (Peters et al., 2014). That is, in the context of NWW, leaders can no longer simply instruct their employees to be more proactive, but they have to empower them to display workplace proactivity and emphasize employees' self-influence and self-directness (Sharma & Kirkman, 2015). Empowering leaders can facilitate and support employees by sharing broader responsibilities and decision-making authority, allowing them to plan their work and make their own decisions (Hill & Bartol, 2016). Although there is an increasing research interest in empowering leadership (cf. Kim, Beehr, & Prewett, 2018; Lee, Willis, & Tian, 2018; Sharma & Kirkman, 2015), only few studies have investigated the relationship between empowering leadership and workplace proactivity (Martin, Liao, & Campbell, 2013; Schilpzand, Houston, & Cho, 2018). Hence, more empirical evidence is needed to reveal how empowering leadership can foster workplace proactivity.

In order to explain how both HRM practices and empowering leadership contribute to workplace proactivity, the empowerment literature can be helpful. Within this body of literature, empowerment is commonly conceptualized in terms of either a structural or a psychological approach (Leach, Wall, & Jackson, 2003; Menon 2001). The structural approach to empowerment typically focuses on organizational and managerial conditions which relate to sharing informal power and information, access and control over resources and rewards, and on the leaders who design them (Bowen & Lawler, 1992). The psychological approach to empowerment focuses on how employees experience their work. When employees make positive assessments in terms of a set of four cognitions (i.e., meaning, competence, self-determination, and impact) that reflect their orientation to work, higher levels of intrinsic task motivation can be achieved, and, therefore, they feel more psychologically empowered (Spreitzer, 1995; Thomas & Velthouse, 1990). Rather than focusing on managerial practices in which power and information are shared with employees at all levels, the psychological perspective is focused on how employees experience their work. In the present study, we will use the empowerment process approach that integrates these two approaches (Conger & Kanungo, 1988; Fernandez & Moldogaziev, 2012; Spreitzer, 1995, 2008) to explain the mechanisms by which empowering HRM practices and empowering leadership may contribute to employees' workplace proactivity.

In view of the literature discussed above and building on the process approach to empowerment, the present study examines how both empowering HRM practices (i.e., professional autonomy, workplace flexibility, and access to knowledge via ICT) and empowering leadership may have the potential to foster workplace proactivity, directly and/or indirectly through psychological empowerment.

This study contributes to the literature in three ways. First, by simultaneously investigating how both HRM practices and leadership might foster workplace proactivity, the present study connects the HRM and leadership literature (Leroy, Segers, Van Dierendonck, & Den Hartog, 2018). Whereas HRM is more focused on the processes and systems in an organization and leadership is more closely related to the individual employee, this study wants to foster our understanding of how HRM and leadership contribute to influencing employee outcomes. Second, by drawing on empowerment as a *process* approach (Conger & Kanungo, 1988; Fernandez & Moldogaziev, 2012; Spreitzer, 1996), we test and uncover explanatory mechanisms that show how HRM practices (i.e., workplace flexibility, professional autonomy, and access to information via ICT) and empowering leadership contribute to workplace proactivity. Finally, we extend previous workplace proactivity research by examining to what extent both empowering HRM practices and empowering leadership may affect employees' workplace proactivity (Bindl & Parker, 2011; Parker, Bindl, & Strauss, 2010).

5.2 Theoretical background and hypotheses

5.2.1 Empowering HRM practices and workplace proactivity

Workplace proactivity, which has become increasingly important in today's global work context, is a type of motivated and change-focused work behaviour that can foster self-initiation (Bateman & Crant, 1999). This implies that employees take self-control and anticipate problems rather than passively wait for problems that can occur or for instructions that can be given (Crant, 2000). Parker and Collins (2010) have characterized workplace proactivity as future and change oriented, comprising behaviours such as taking charge, expressing voice, showing individual innovation, and demonstrating problem prevention. *Taking charge* refers to employees' efforts to realize change with respect to how the work is executed. *Expressing vo*ice is concerned with speaking out and seeking information about issues in the work context. *Individual innovation* focuses on novelty in order to influence the work context. Finally, *problem prevention* is related to the way in which challenges and obstacles in the work environment are dealt with (Parker & Collins, 2010). In the context of NWW, organizations have adopted empowering HRM practices (in this study, workplace flexibility, professional autonomy, and access to knowledge via ICT) to stimulate workplace proactivity, since this enables employees to make choices about their work and encourages them to take initiatives when it comes to solving problems and changing the current circumstances beyond their work-related tasks. These relationships will be discussed below.

The concept of workplace flexibility is related to that of time-spatial flexibility, referring to 'when' and 'where' employees work (Gerdenitsch et al., 2015; Hill, Grzywacz, Allen, Blanchard, Matz-Costa, Shulkin, & Pitt-Catsouphes, 2008). Employees have the freedom and independence to decide when the work is carried out and for how long work is performed. In addition, employees have various options for where to do their work, both outside and within the office environment. In the context of telework and flexible work, Kelliher and Anderson (2010) argued that employees work harder to give something back to the organization in gratitude for the flexibility they have received that allows them to better deal with their challenges at work and at home. In a similar vein, giving employees the opportunity to work flexibly might enhance their feelings of being supported, which might encourage them to display workplace proactivity. Therefore, we propose the following:

Hypothesis 1a: Workplace flexibility has a positive relationship with workplace proactivity.

A concept related to workplace flexibility is professional autonomy, which refers to the extent of control that employees have over 'how' to perform and execute work (Gerdenitsch et al., 2015; Sardeshmukh, Sharma, & Golden, 2012). Particularly important is the degree to which the job provides freedom and discretion for the employee in scheduling his/her work, in decision making, and in determining how the work can be carried out (Hackman & Oldham, 1976; Morgeson & Humphrey, 2006). Yet, employees who have more freedom also face a number of responsibilities that emerge from particular agreements about achieving results. In fact, work results and output from work are more important than the number of hours actually worked (Peters, Den Dulk, & Van der Lippe, 2009). Peters et al. (2014) pointed out that in recent decades, accountability concerning the execution of work activities has increasingly shifted towards the employee. Professional autonomy, viewed as a job resource, can therefore generate positive employee outcomes (Bakker & Demerouti, 2007). Moreover, Parker, Williams, and Turner (2006) consider job autonomy to be an important factor for workplace proactivity. When employees experience that they have control over their work and are involved in challenging tasks, they may experience a work climate that fosters proactive work (Coun, Gelderman, & Perez, 2015; Rank, Karsten, Unger, & Spector, 2007). Based on this, we propose the following:

Hypothesis 1b: Professional autonomy has a positive relationship with workplace proactivity.

Besides workplace flexibility and professional autonomy, also access to information and knowledge via ICT are ingredients for structural empowerment (Bowen & Lawler, 1992; Spreitzer, 1996, 2008) as these can support workers to perform better. The increased evolution of connectivity technologies, both with respect to hardware and software systems, has provided significant potential for flexible working possibilities (Wynarczyk, 2005). Organizations can use social ICT and online knowledge management platforms to enhance virtual collaboration across organizational or team boundaries. Collecting and sharing knowledge and information next to being active in social networks suits the preferences and skills of knowledge workers (Liu & De Frank, 2013). In addition, access to digital information and support from digital technology is important to generate and implement creative and innovative ideas in the workplace (Oldham & Da Silva, 2015). Therefore, ICT access to enhance knowledge sharing might enhance self-directed action, something which is central in order to engage in workplace proactivity. Based on the account above, we propose the following:

Hypothesis 1c: Access to knowledge via ICT has a positive relationship with workplace proactivity.

5.2.2 Empowering leadership and workplace proactivity

Empowering leadership can be defined as a leadership behaviour through which leaders delegate authority to their employees in order to promote autonomous and self-directed decision making. It involves sharing power with employees, encouraging self-management, and supporting employees by giving them space and confidence to handle challenging work without direct interference (e.g., Ahearne, Mathieu, & Rapp, 2005; Sharma & Kirkman, 2015). With regard to workplace proactivity, empowering leadership might be important especially when employees have to do their work with a high degree of discretion (Sharma & Kirkman, 2015). In contrast to transformational leaders, who inspire followers with a vision or who challenge them intellectually but still retain all the decision-making and leadership authority, empowering leaders actually transfer much control and power to subordinates (Kim et al., 2018). Empowering leadership encourages employees to take responsibility, to face difficulties, and to collaborate with others (Arnold, Arad, Rhoades, & Drasgow, 2000). In this regard, empowering leadership encourages employees' initiative and independent workplace behaviour. Empowering leadership can result in employees making their own decisions rather than simply being influenced by their leaders (Ahearne et al., 2005). As employees' workplace proactivity refers to their anticipatory activities in taking the initiative and being in charge of changes with the aim to have an impact on their own work context, we might expect that empowering leaders

are responsive to and able to reinforce proactive employees. Previous studies have in fact shown that empowering leadership has the potential to enhance proactive work behaviour (Chen et al., 2019; Martin et al., 2013). Therefore, we propose the following:

Hypothesis 2: Empowering leadership has a positive relationship with workplace proactivity.

5.2.3 The mediating role of psychological empowerment

Psychological empowerment addresses employees' intrinsic task motivation, manifested in four cognitions (i.e., meaning, self-determination, competence, and impact), reflecting how employees experience their work (Thomas & Velthouse, 1990). The cognition of 'meaning' refers to employees' feelings of sense and enjoyment in their work, and 'impact' occurs when employees believe they can affect outcomes in their work. The cognition of 'competence' is the capability of accomplishing task goals; 'self-determination' is defined as the situation in which employees have the freedom to choose how they do their work. Hence, when employees experience all four psychological states, higher levels of intrinsic task motivation can be achieved, and thus greater psychological empowerment emerges (Spreitzer, 1995). To conclude, psychological empowerment is not an organizational intervention or a dispositional trait but rather a cognitive state achieved when individuals perceive that they are empowered. Those feelings of psychological empowerment may be affected by the organizational context, in particular by empowering HRM practices and leadership (Seibert, Wang, & Courtwright, 2011).

Workplace flexibility assumes that employees have a say where (place), when (time), and for how long they work (Hill, Grzywacz, Allen, Blanchard, Matz-Costa, Shulkin, & Pitt-Catsouphes, 2008). Building on self-determination theory (Deci & Ryan, 2000), Carless (2004) reported that time-spatial flexibility appeals to the need satisfaction of autonomy and competence, both of which are important for employees' autonomous motivation. Moreover, when it comes to psychological empowerment, the basic psychological need for autonomy and competence is closely related to the social cognitions of self-determination and feeling competent (Gagné & Vansteenkiste, 2013). Consequently, employees might make themselves more available, which means that they can be consulted readily. This gives employees the feeling that their work is meaningful. According to Peters, Ligthart, Bardoel, & Poutsma (2016), access to telework can enhance workers' motivation, commitment, and engagement as it is associated with prestige and signals trust in employees. In this vein, workplace flexibility may enhance employees' status and hence the feeling that they can have an impact. This leads us to assume that time-spatial

flexibility fosters employees' cognition of psychological empowerment (i.e., self-determination, competence, meaning, and impact). Therefore, we propose the following:

Hypothesis 3a: Workplace flexibility has a positive relationship with psychological empowerment.

Besides workplace flexibility, professional autonomy is also important for employees so that they have a say in how to perform their work. In line with the job characteristics theory (Hackman & Oldham, 1976), it can be argued that professional autonomy fosters self-determination and meaning (Humphrey, Nahrgang, & Morgeson, 2007). In addition, based on the job demands resource model (Demerouti & Bakker, 2014), it can be argued that professional autonomy, viewed as a job resource, is positively related to psychological empowerment (Quiñones, Van den Broeck, & De Witte, 2013). Moreover, professional autonomy can enhance employees' feelings of having impact on their work environment since they can make personal choices how to accomplish their tasks. In addition, employees who are given greater autonomy experience more control over their work, which enhances their feeling of being more competent for their work. Based on this, we propose the following:

Hypothesis 3b: Professional autonomy has a positive relationship with psychological empowerment.

As discussed previously, having access to digital information and support via ICT is of major importance for knowledge sharing in organizations. The relationship between access to information and psychological empowerment is already widely acknowledged in both the professional and academic literatures. Spreitzer (1996) found empirical evidence that having access to information is positively associated with perceptions of empowerment. Access to information helps employees to see the bigger picture and thus the impact of their work (Spreitzer, 1996). On the basis of social cognition theory (SCT) (Bandura, 1986, 2002), we assume that individuals pursue a sense of agency and belief that they can have impact on important matters in their work environment. Moreover, SCT suggests that access to information can contribute to self-efficacy (Gist & Mitchell, 1992) since this helps to create a sense of meaning and purpose and enhances employees' ability and competence to make decisions. Led by the above, we assume that access to knowledge facilitates cognitions of empowerment and thus psychological empowerment.

Hypothesis 3c: Access to knowledge via ICT has a positive relationship with psychological empowerment.

Empowerment leadership represents leadership behaviour that may increase employees' perception of psychological empowerment because of the role that leaders play in shaping work experiences (Spreitzer, 2007). Empowering leadership, too, has theoretical roots in SCT (Bandura, 1986) and emphasizes employees' self-influence processes rather than hierarchical control by a manager (Houghton, & Yoho, 2005). From this perspective, an empowering leader can enhance employees' cognitive processes to manage their own behaviour and will therefore enhance psychological empowerment. In line with this, it has been argued that empowering leadership involves leadership behaviour that enhances employees' perceptions of meaningfulness by supplying information and that expresses confidence in high performance, which enhances their participation in decision making and strengthens feelings of self-determination and impact (Ahearne, Mathieu, & Rapp, 2005). Finally, empowering leaders can provide employees with constructive feedback, an important source of self-efficacy that enhances employees' feelings of competence (Bandura, 1996). Some researchers have already reported empirical evidence for this (e.g., Lee, Willis, & Tian, 2018; Zhang & Bartol, 2010). Led by the above, we propose the following:

Hypothesis 4: Empowering leadership has a positive relationship with psychological empowerment.

Furthermore, psychological empowerment theory posits that employees' experience of psychological empowerment can be related to several work outcomes, as empowered employees have an active orientation towards work (cf. Spreitzer, 1995; Thomas & Velthouse, 1990). When employees perceive the *impact* and *meaningfulness* of their own work role, they might become confident that they can understand problems from various perspectives and influence the organization. This feeling may encourage them to undertake more risks and respond to future possibilities, and thus to display higher levels of proactive work behaviour. In addition, employees who experience *self-determination* and the *capability* to accomplish their jobs, who put in a greater amount of effort, and who continue to solve any problems that they may encounter are more likely to be proactive in their work (Parker et al., 2006; Spreitzer, 1995). The four dimensions reflect an active rather than a passive orientation to one's work role. In other words, empowered individuals do not see their work situation as 'given', but rather something that enables them to shape their own actions. Psychologically empowered employees are more confident at work and can strengthen their problem-solving abilities (Spreitzer, 1995), resulting in higher degrees of workplace proactivity. Led by this, we propose the following:

Hypothesis 5: Psychological empowerment has a positive relationship with workplace proactivity.

Finally, as empowering HRM practices and empowering leadership on the one hand and psychological empowerment on the other are both expected to directly relate to workplace proactivity, their inter-relatedness suggests that psychological empowerment may also be a mechanism through which HRM practices and empowering leadership impact workplace proactivity. In this regard, social cognition theory (Bandura, 1986) can explain how employees function in terms of a triadic interplay between the environment, the individual's cognitive state, and his or her behaviour. Employees do not merely undergo the influences of their environments in a passive manner, but they can be seen to actively shape their work environment. In the context of NWW, the social environment includes the HRM practices offered by the organization and the empowering leader, which can influence employees' cognitive states and contributes to psychological empowerment. This has motivational potential and results in an active rather than a passive approach to work (Spreitzer, 1995). For these reasons, we assume that employees who experience to be psychologically empowered will also display workplace proactivity. Empowerment scholars have acknowledged that psychological empowerment serves as a mediating mechanism which enhances the positive effect of structural factors (cf. Maynard, Gilson, & Mathieu, 2012; Seibert et al., 2011). In this regard, we might expect that both empowering HRM practices and leadership may evoke psychological empowerment that will motivate employees to display workplace proactivity. In line with the above, we propose the following:

Hypothesis 6a-6b-6c: Psychological empowerment mediates the relationships between HRM practices (workplace flexibility, professional autonomy, access to knowledge via ICT) and workplace proactivity.

Hypothesis 7: Psychological empowerment mediates the relationship between empowering leadership and workplace proactivity.

Figure 5.1 depicts the hypothesized relationships in the conceptual model.

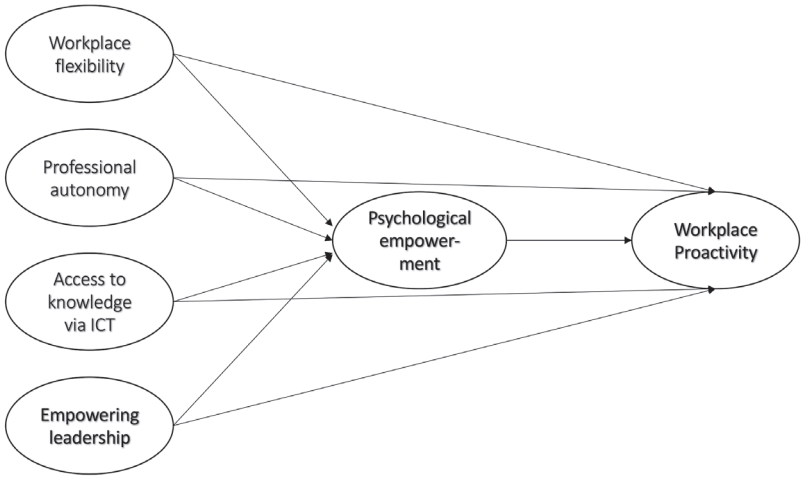


Figure 5.1 Conceptual model: mediating effect of psychological empowerment on empowering HRM practices (workplace flexibility, professional autonomy, access to knowledge via ICT), empowering leadership, and workplace proactivity.

5.3 Method

5.3.1 Data

An online questionnaire was administered to 1,111 respondents from 4 subsidiaries of a large Dutch bank active in the financial sector in the Netherlands. These organizations were early adopters of the concept of self-managing teams and had implemented NWW by offering HRM practices. Of all respondents, 342 (31%) filled out the questionnaire completely without errors. From this cross-sectional sample, 177 respondents reported having completed university education at Bachelor's (47%) and Master's (37%) level. Of the total sample, 56% were female and 44% male.

5.3.2 Measures

Workplace proactivity was measured with the validated questionnaire developed by Parker and Collins (2010). This questionnaire consists of four subscales: Taking Charge (3 items), Voice (4 items), Individual Innovation (3 items), and Problem Prevention (3 items). A 5-point Likert scale was used for all items (ranging from 1 = Completely disagree to 5 =

Completely agree). We used all four subscales in one construct to measure workplace proactivity, as suggested by Parker and Collins (2010). Sample items included "Try to implement solutions to pressing organization problems" (Taking Charge), "Speak up and encourage others in the workplace to get involved with issues that affect you" (Voice), "Generate creative ideas" (Individual Innovation), and "Try to develop procedures and systems that are effective in the long term, even if they slow things down to begin with" (Problem Prevention).

Empowering leadership was measured with the validated questionnaire developed by Arnold et al. (2000). This questionnaire consists of five subscales which include Leading by Example (5 items), Participative Decision Making (5 items), Coaching (6 items), Informing (4 items), and Showing Concern/Interacting with the Team (6 items). A 5-point Likert scale was used for all items (ranging from 1 = Never to 5 = Always). As suggested by Arnold et al. (2000), we used all five subscales in one construct. Sample items included "Sets a good example by the way he/she behaves" (Leading by Example), "Encourages to express ideas/suggestions" (Participative Decision-Making), "Encourages to solve problems together" (Coaching), and "Explains the purpose of the company's policies" (Informing).

Psychological empowerment was measured with the validated questionnaire proposed by Spreitzer (1995). This questionnaire consists of four subscales that include Meaning (3 items), Self-Determination (3 items), Competence (3 items), and Impact (3 items). A 7-point Likert scale was used for all items (ranging from 1 = Completely disagree to 7 = Completely agree). As suggested by Spreitzer (1995), we used all four subscales in one construct. Sample items included "The work I do is meaningful for me" (Meaning), "I have considerable opportunity for independence and freedom in how I do my job" (Self-Determination), "I am confident about my ability to do my job" (Competence), and "I have significant influence over what happens in my department" (Impact).

Professional Autonomy (8 items), *Workplace Flexibility* (3 items), and *Access to Knowledge via ICT* (6 items) as empowering HRM practices were based on the available literature on new ways of working (cf. Baane, Houtkamp, & Knotter, 2010; Bijl, 2009; Coun, et al., 2015; Peters et al., 2014). A 5-point Likert scale was used for all items (ranging from 1 = Completely disagree to 5 = Completely agree). Sample items included "Decide how to do your work" (Professional Autonomy), 'Work from home or from the office at your discretion" and 'Finish work on weekends or evenings" (Workplace Flexibility), and "Have access to all the information needed for my work outside the office" (Access to Knowledge via ICT).

5.3.3 Procedure

As the nature of our research was explanatory, we conducted PLS–SEM using SmartPLS version 3.2.3 (Ringle, Wende, & Will, 2015). Our purpose was to estimate the predicting power of the hypothesized model. For the partial least square algorithm, we used the path weighting scheme with the maximum number of iterations set at 300 and 10^-5 as our stop criterion. We used a uniform value of 1 as the initial value for each of the outer weights (Henseler, 2010). In view of the rule of thumb provided by Barclay, Higgins, and Thompson (2005), suggesting the use of 10 times the maximum number of paths aiming at any construct in the outer and inner models, the sample size was considered acceptable.

5.4 Results

5.4.1 Model characteristics

For the outer model evaluation, we first examined reliability and convergent validity. We checked for convergent validity using Fornell and Larcker's (1981) criterion of an average variance extracted (AVE) for each construct above the 0.5 benchmark. We checked for reliability using Nunnaly's (1978) Cronbach's Alfa threshold of 0.7.

'Workplace Flexibility' and 'Professional Autonomy' were found to have enough validity and reliability to meet the required benchmarks. After two items had been removed, 'Access to Knowledge' via ICT was also found to have enough convergent validity and reliability. 'Empowering Leadership' was shown to meet the required benchmarks after the removal of four items. For 'Psychological Empowerment', we removed three items to ensure sufficient convergent validity and reliability. Finally, we removed five items from 'Workplace proactivity' for sufficient convergent validity and reliability. For all the constructs, items of all the related sub-constructs were represented as mentioned above (cf. Arnold et al., 2000; Parker & Collins, 2010; Spreitzer, 1995). Table 5.1 provides an overview of all constructs and their reliability and convergent validity characteristics.

Finally, we checked for discriminant validity, comparing the AVEs of the constructs with the inter-construct correlations determining whether each latent variable shared greater variance with its own measurement variables or with other constructs (Chin, 1998; Fornell & Larcker, 1981). We compared the square root of the AVE for each construct with the correlations with all other constructs in the model (Table 5.2). A correlation between constructs exceeding the square roots of their AVEs indicates that they may not be

sufficiently discriminable (Table 5.2). For each construct, we found that the absolute correlations did not exceed the square roots of the AVEs. Hence, we may conclude that all constructs showed sufficient reliability and validity.

Table 5.1 Overview descriptive, reliability, and convergent validity scores

	Actual range	Mean	Standard Deviation	Cronbach's Alpha	AVE
Workplace proactivity	1.71 – 5.00	3.44	0.52	0.85	0.50
Workplace Flexibility	1.33-7.00	5.50	1.26	0.79	0.71
Professional Autonomy	1.75-6.88	4.95	1.01	0.88	0.54
Access to Knowledge via ICT	2.00 - 7.00	5.79	0.79	0.73	0.56
Empowering Leadership	1.36 - 5.00	3.85	0.52	0.95	0.50
Psychological Empowerment	2.25 - 7.00	5.13	0.88	0.87	0.50

Table 5.2 Correlations coefficients and square roots of average variance extracted (AVE)

Construct	PWB	WF	PA	AICT	EL	PE
Workplace proactivity (PWB)	0.70					
Workplace Flexibility (WF)	0.29**	0.84				
Professional Autonomy (PA)	0.29**	0.71**	0.74			
Access to Knowledge via ICT (AICT)	0.17**	0.53**	0.53**	0.75		
Empowering Leadership (EL)	0.12	0.24**	0.24**	0.29**	0.71	
Psychological Empowerment (PE)	0.24**	0.48**	0.73**	0.48**	0.28**	0.71

Note. ** $p < 0.01$ diagonal numbers shown in boldface denote the square root of the average variance extracted (AVE) of each construct

5.4.2 Common-method variance

As we conducted our research using a self-administered survey method, we tested for common-method variance (CMV) to evidence the absence of systematic bias that might have influenced the collected data (Podsakoff, Mac Kenzie, Lee, & Podsakoff, 2003). We used a two-step approach. First, following Podsakoff and Organ (1986), we used Harman's (1976) one-factor test. In line with this approach, all principal constructs were

entered into one principal component factor analysis. Using SPSS software (SPSS version 26 for Windows), we applied the extraction method of principal component of one fixed factor with no rotation method. Results showed that with only one factor emerging, less than 50% of the variance (25.01%) was explained, which gives a first indication of the absence of common-method variance. Second, we used the method proposed by Bagozzi, Yi, and Phillips (1991), which stresses that CMV occurs when the highest correlation between constructs is more than 0.9. As shown in Table 5.3, the highest correlation between constructs is 0.7 (correlation between Professional Autonomy and Psychological Empowerment). Therefore, we concluded that no CMV was found in the collected data.

5.4.3 Model estimations

Regarding the inner model evaluation and estimates, we analysed the path coefficients by using bootstrap t-statistics for their significance (Anderson & Gerbing, 1988). For this bootstrapping, we used 5,000 subsamples, with a bias-corrected bootstrap, testing for a two-tailed significance of 95%. The model showed a good model fit: the standardized root mean square residual (SRMR) was 0.07, which is in line with Hu and Bentler's (1998) criterion of a value lower than 0.08. To test the hypotheses, we first calculated the direct effects for the differentiated paths in the model (see Table 5.3). Second, we tested the predictive power using Cohen's (1988) f^2effect size to indicate whether each construct had a weak, average, or strong effect on 'Psychological Empowerment' and 'Workplace proactivity'. Finally, to test the mediating role of Psychological Empowerment, we tested the indirect effects of the independent variables via Psychological Empowerment on Workplace proactivity.

5.4.4 Hypothesis testing

As depicted in Table 5.3, Hypothesis 1a was not supported by the data as 'Workplace Flexibility' had no significant direct effect on 'Workplace proactivity' (γ = 0.09, p = .256, R^2 = 0.28). Hypothesis 1b was also not supported by our data. Whereas a positive effect was expected, 'Professional Autonomy' was found to have a negative significant effect on Work Proactivity (γ = -.19, p = 0.031, R^2 = 0.28). However, the predictive power was low (f^2 = 0.02). Hypothesis 1c was also not supported by the data. 'Access to knowledge via ICT' had no significant effect on 'Workplace proactivity' (γ = -.08, p = .196, R^2 = 0.28). Hypothesis 2 was not supported as 'Empowering Leadership' had no significant direct effect on 'Workplace Proactivity' (γ = -.01, p = .845, R^2 = 0.28). Hypothesis 3a, however,

Table 5.3 Structural relationships with path coefficients (γ) and predicting power f^2.

	f^2 values	Coefficient (γ)	*T* Statistics	*P* Values	Hypothesis tested
Workplace Flexibility → Workplace proactivity	0.01	0.09	1.14	0.256	1a
Professional Autonomy → Workplace proactivity	0.02	-0.19	2.15	0.031	1b
Access to Knowledge via ICT → Workplace proactivity	0,01	-0.08	1.29	0.196	1c
Empowering Leadership → Workplace proactivity	0.00	-0.01	0.20	0.845	2
Workplace Flexibility → Psychological Empowerment	0.01	-0.11	1.95	0.051	3a
Professional Autonomy → Psychological Empowerment	0.53	0.71	13.74	0.000	3b
Access to Knowledge via ICT→ Psychological Empowerment	0.02	0.13	2.11	0.035	3c
Empowering Leadership→ Psychological Empowerment	0.02	0.11	2.64	0,008	4
Psychological Empowerment → Workplace proactivity	0.26	0.65	10.52	0.000	5
Workplace Flexibility → Psychological Empowerment → Workplace proactivity		-0.07	1.92	0.054	6a
Professional Autonomy → Empowerment → Workplace proactivity		0.46	8.80	0.000	6b
Access to Knowledge via ICT→ Psychological Empowerment → Workplace proactivity		0.08	1.98	0.048	6c
Empowering Leadership → Psychological Empowerment → Workplace proactivity		0.07	2.55	0.011	7

was supported as 'Workplace Flexibility' had a significant relationship with 'Psychological Empowerment' (γ = -.11, $p < .050$, $R^2 = 0.55$), albeit with a low predictive power ($f^2 = 0.01$). Hypothesis 3b was supported as 'Professional Autonomy' had a significant effect on 'Psychological Empowerment' ($\gamma = .71$, $p < 0.000$, $R^2 = 0.55$) with strong predictive power ($f^2 = 0.53$). Hypothesis 3c was also supported as 'Access to Knowledge via ICT' had a significant relationship with 'Psychological Empowerment' ($\gamma = .13$, $p = .035$, $f^2 = 0.55$), albeit with a low predictive power ($f^2 = 0.02$.). Hypothesis 4 was supported as 'Empowering Leadership' had a significant effect on 'Psychological Empowerment' ($\gamma = .11$, $p = 0.008$, $R^2 = 0.55$) with low predictive power ($f^2 = 0.02$). Hypothesis 5 was supported as 'Psychological Empowerment' had a significant effect on 'Workplace proactivity' ($\gamma = .65$, $p < 0.000$, $R^2 = 0.28$) with strong predictive power ($f^2 = 0.26$). After calculating the indirect

effects, we found no support for Hypothesis 6a (γ = -0.07, p = 0.054, R^2= 0.29). We did find support for Hypothesis 6b (γ = 0.46, p < 0.000, R^2 = 0.29), for Hypothesis 6c (γ = 0.08, p = 0.048, R^2 = 0.29), and for Hypothesis 7 (γ = 0.07, p = 0.011, R^2 = 0.29).

We also tested for possible moderations of Empowering Leadership on the relationship between HRM practices (Workplace Flexibility, Professional Autonomy, and Access to Knowledge via ICT) and Workplace proactivity. As depicted in Table 5.4, all interactions were found to be non-significant, which supports the claim that 'Empowering Leadership' and HRM practices ('Workplace Flexibility', 'Professional Autonomy', and 'Access to Knowledge via ICT') do not interact with 'Workplace proactivity'. Furthermore, we tested for possible moderations of 'Empowering Leadership' on the relationship between HRM practices and 'Psychological Empowerment'. Here, too, none of the interactions proved to be significant (see Table 5.5).

Table 5.4 Interactions HRM practices and empowering leadership and the relation with workplace proactivity

	Coefficient (*γ*)	***SD***	***T* Statistics**	***P* Values**
Professional Autonomy x Empowering Leadership → Workplace proactivity	-0.02	0.09	0.15	0.88
Access to Knowledge via ICT x Empowering Leadership → Workplace proactivity	0.03	0.06	0.48	0.63
Workplace Flexibility x Empowering Leadership → Workplace proactivity	0.05	0.09	0.46	0.65

Table 5.5 Interactions HRM practices and empowering leadership and the relation with psychological empowerment

	Coefficient (*γ*)	***SD***	***T* Statistics**	***P* Values**
Professional Autonomy x Empowering Leadership → Psychological Empowerment	0.09	0.05	1.71	0.09
Access to Knowledge via ICT x Empowering Leadership → Psychological Empowerment	-0.03	0.05	0.69	0.49
Workplace Flexibility x Empowering Leadership → Psychological Empowerment	-0.07	0.04	1.80	0.07

5.5 Discussion and theoretical contributions

The aim of the present study was to investigate simultaneously to what extent HRM practices (i.e., workplace flexibility, professional autonomy, and access to information via ICT) and empowering leadership contribute to workplace proactivity in NWW contexts. Employees' proactivity has become important since decentralization and digitalization have forced organizations to set up self-organizing teams. The transition from direct control to the delegation of responsibilities requires more empowered and self-controlled employees. We applied an empowerment process approach (cf. Conger & Kanungo, 1988; Fernandez & Moldogaziev, 2012; Spreitzer, 1995) to determine to what extent structural empowerment factors such as HRM practices and empowering leadership have the potential to autonomously motivate employees to display workplace proactivity and what the mediating role of psychological empowerment is. The results of our study revealed a significant mediating role of psychological empowerment in the relationship between HRM practices particularly for professional autonomy, access to knowledge, and empowering leadership on the one hand and proactive workplace behaviour on the other hand. In order to focus on the motivating elements in our model, we shall discuss our main findings and contributions below.

First, we found that the relationship between professional autonomy as an HRM practice and workplace proactivity was partially mediated by psychological empowerment. When professional autonomy ensures that employees make positive assessments of the four aspects of their work role (i.e., impact, competence, meaning, and self-determination), they achieve higher levels of autonomous motivation, feel more psychologically empowered, and therefore display workplace proactivity. This finding gives empirical evidence for Spreitzer's idea (1995, 2008) that when professional autonomy appeals to an individual's sense of psychological empowerment, this results in an active rather than a passive approach to work. However, and in contrast to insights from the proactivity literature (Parker, 2006), professional autonomy as an HRM practice can have a negative effect on work proactivity when this does not lead to psychological empowerment. Probably, professional autonomy may hinder proactivity when employees experience a lack of direction. The goal-setting theory (cf. Latham & Locke, 2006) points out that high levels of professional autonomy allow employees to achieve their goals more easily and to select more options. However, professional autonomy can also lead to employees setting unachievable goals or choosing non-appropriate goals. Consequently, professional autonomy combined with increased accountability might cause strain or pressure, make employees less decisive, and therefore might hold them back rather than make them more proactive. Indeed, scholars reported that too much professional autonomy is detrimental to employees' mental health, as this is likely to create pressure (Kubicek, Paškvan, & Bunner, 2017; Peters et al., 2014; Stiglbauer & Kovacs, 2018).

Second, the relationship between access to digital information supported by ICT technology and workplace proactivity was shown to be fully mediated by psychological empowerment. Obviously, 'access to knowledge via ICT' has empowering potential as it can play an important role for employees to feel in control and self-determinant, improving employees' capabilities and skills and giving them confidence in terms of having an impact on the organization and having meaningful work. This can intrinsically motivate employees, which in turn can foster workplace proactivity. This is in line with previous research reported by Spreitzer (1996), who found in a study of middle managers that the role of access to information is an important antecedent for psychological empowerment. However, the absence of a direct effect of access to knowledge via ICT implies that this HRM practice is not sufficiently effective in terms of enhancing workplace proactivity when employees do not feel empowered.

Third, and contrary to our expectations, workplace flexibility was also not found to be a significant HRM practice that contributes to psychological empowerment in terms of fostering workplace proactivity. Probably, employees in contemporary organizations perceive workplace flexibility as a general condition, necessary to combine work and family, for example, but insufficient for displaying workplace proactivity. However, this HRM practice was not found to hinder workplace proactivity either. This is in line with findings reported by scholars who argue that providing employees with the opportunity to decide when, where, and how long they work has increasingly become a right that is built into the employee-employer psychological contract rather than a motivating working condition (Canibano, 2019; Root & Young, 2011). In this regard, workplace flexibility might be considered a 'hygiene factor' (Herzberg, Mausner, & Snydermann, 1959), the absence of which leads to 'dissatisfaction' whilst the appearance of this condition is not a motivator for employees.

Fourth, above and beyond professional autonomy and access to knowledge via ICT, we found that the empowering leadership style of the manager, only when employees experience to be psychologically empowered, can encourage employees to take initiatives and become proactive in the workplace. There is no autonomous effect of empowering leadership on workplace proactivity besides this mediation effect. Frese and Fay (2001) pointed out that supervisors may not always foster proactivity, particularly when changes in procedures and routines are perceived as strenuous or threatening. In this regard, the results indicate that sharing power with employees by offering them responsibility and decision-making authority, such as giving support to handle the additional responsibility, enhances employees' sense of psychological empowerment (Kim et al., 2018; Raub & Robert, 2010). The finding that empowering leadership only has an indirect effect suggests that leaders need to truly inspire and intrinsically motivate employees. Hence, feeling

supported by an empowering supervisor can indeed motivate employees, which in turn can foster their work proactivity.

Finally, our additional analyses on the interactions between each single HRM practice (i.e., workplace flexibility, professional autonomy, and access to information via ICT) and empowering leadership was not found to be significantly related with psychological empowerment, nor with workplace proactivity. Hence, HRM practices and empowering leadership are complementary: they combine different perspectives for employees.

Our research has made a number of significant theoretical contributions.

First, by simultaneously investigating how HRM practices and leadership foster workplace proactivity, we have contributed to the ongoing debate about the integration of the studies of HRM and leadership to enhance our understanding of how HRM and leadership enhance the empowerment of employees in displaying workplace proactivity (Leroy et al., 2018). As such the leader and the HRM systems and processes are two starting points for influencing people's behaviour, but they can be related in different ways. They can substitute, reinforce, complement each other, can be used in different ways and in different sequences. Particularly, our study found that HRM and leadership can both contribute to employees' workplace proactivity via psychological empowerment, which can be linked with one of the mechanisms distinguished by Leroy et al. (2018). The results of our study are in line with the HRM literature that suggests that consistency of signals that are sent from both HRM systems and processes and leadership behaviour, are important for employees' reactions and attitudes (cf., Bowen & Ostroff, 2004). In our study we have found that HRM and leadership are complementary although some prior research with different variables and outcomes in different context found that HRM systems and processes can substitute leadership behaviour (e.g. Audenaert, Vanderstraeten, & Buyens, 2017) or leadership can compensate for HRM (e.g. Ehrnrooth, Barner-Rasmussen, Koveshnikov, & Törnroos, 2020), or either can strengthen each other (e.g. Audenaert et al., 2017; Ehrnrooth et al., 2020). The results of our study might indicate that HRM and leadership can offer guidance for employees' behaviour in organizations which can be viewed in light of Mintzberg (1979) who suggested that when power is decentralized and decision making is shared in organizations, formal policies and rules are necessary to clarify and to set shared goals and to provide guidance. Accordingly, formalization through empowering HRM practices (i.e. job design, homework-policy and knowledge management) associated with NWW and decentralization through empowering leadership can have both a positive effect on employees' psychological empowerment and hence workplace proactivity. In addition, our study has also extended previous research which was mainly focused either on the HRM system or on HR practices (e.g. Arefin et al., 2015;

Chen et al., 2017; Lee, Pak, Kim, & Li, 2019), or on the role of empowering leadership (e.g. Martin et al., 2014; Schilpzand et al., 2018) in relation to employees' workplace proactivity.

Second, by drawing on the empowerment process approach (Conger & Kanungo, 1988; Fernandez & Moldogaziev, 2012; Spreitzer, 2007), this study provides additional insights into how HRM practices (workplace flexibility, professional autonomy, and access to knowledge) combined with empowering leadership are necessary, but not sufficient, for fostering employees' workplace proactivity. The process of psychological empowerment of employees is needed and mediates the relationship between the structural features of managerial empowerment elements and proactivity. Particularly by investigating single HRM practices combined with empowering leadership, we have disentangled the structural facets which actually drive the associations. In this regard, we have extended empowerment research that most commonly investigated only human resource (HR) practices (cf. Arefin et al., 2015; Lee et al., 2019; Maynard et al., 2012) rather than their individual components and the role of leadership (cf. Fong & Snape, 2015). In addition, by using an empowerment process approach, we have explained that empowerment can be regarded as an interactional process in which psychological empowerment is shaped through structural factors such as empowering HRM practices and leadership, and we have explained how this produces behavioural outcomes such as workplace proactivity. This contributes to the empowerment theory (Spreitzer, 1996) through the acknowledgement that the meaning of empowerment differs from employee to employee, as this is a result of the different employees' interpretations of practices, policies, and forms of leadership within their work context, and how this eventually affects their own psychological state. The empowerment process can be seen as a sense-making process among employees through their own views of HR practices (Nishii &Wright, 2008; Weick, 1995).

Finally, our study has extended proactivity literature (Parker et al., 2010, 2011) by focusing on how in contemporary organizations, HRM practices (professional autonomy and access to knowledge via ICT) and empowering leadership can only indirectly influence employees' workplace proactivity, that is, when empowering practices and leadership foster psychological empowerment. Although typical HRM practices (selective staffing, training, and reward) and HR systems have been widely examined in the body of literature on proactivity (Arefin et al., 2015; Lee et al., 2019), to our knowledge the investigation of empowering HRM practices that intrinsically motivate employees to develop workplace proactivity has been limited, and studies have not offered a theoretical framework to understand how this proactivity emerges.

5.6 Limitations and avenues for future research

The current study has a number of limitations and some new directions for further research.

First, because we used a cross-sectional design, the dynamic interplay between empowering HR practices and empowering leadership could not be studied, which precluded the determination of causal relationships. In addition, although the empowerment process theory assumes a process, this sequence could not be tested based on the cross-sectional design. Conclusions on causal effects should, therefore, be treated with much caution and reservations, due to the shortcoming of measuring one time. Research approaches such as longitudinal studies are needed to draw firm conclusions about causal relationships. In line with this longitudinal approach, as modern work is changing so rapidly, it would be worthwhile to examine how employees react to organizational changes driven by digitalization and artificial intelligence. Future studies should analyse the positive and negative implications of the consequences of remote working, oftentimes enforced in times of the Covid19-pandemic, and how they evolve over time. How do attitudes of employees towards work change at different implementation stages?

Second, this study focused on the impact of HRM practices (workplace flexibility, professional autonomy, and ICT access) on workplace proactivity. However, proactive employees might have more opportunities and abilities for job crafting and for negotiating their own (flexible) working arrangements. Proactive individuals could also be more able and motivated to adjust and craft their work tasks (cf. Bakker, Tims, & Derks, 2012; Clegg & Spencer, 2007). Future research could investigate the dynamic relationship between proactive personality, the crafting of working arrangements, and proactive work behaviour. Investigating the possibility of reverse causality might also be interesting to uncover the dynamics of empowerment in the work context. For instance, workplace proactivity may lead to greater structural empowerment, which in turn can contribute to greater psychological empowerment.

Third, as familiarity with remote working has increased over the years and the Covid-19 crisis has also promoted the acceptance of HRM practices related to NWW by managers and employees, one can expect that the outcomes of our study become important for many other workers than highly educated knowledge workers. However, it would be worthwhile to explore the dynamics that develop when employees are obliged or forced to work remotely almost full-time due to the Covid-19 crisis. In addition, as empowerment is about the distribution of power in organizations, authority, autonomy, and responsibility

have to be delegated to employee levels. However, people do not necessarily give up their control and power easily (Maynard et al., 2012). Future research could further explore how organizations that have embraced NWW and teleworking during the Covid-19 crisis will continue these practices.

Finally, in an attempt to connect the leadership and HRM literature, our study has investigated simultaneously how both leadership and HRM practices contribute to proactivity. Led by the results of our study, we found that in the context of NWW, HRM and leadership can be regarded as complementary as they combine different perspectives for employees. Whilst some studies (e.g. Audenaert et al., 2017; Ehrnrooth et al., 2020) found interaction effects between HRM and leadership, others (Jo, Aryee, Hsiung, & Guest, 2020) could not find synergetic interaction effects between HRM and leadership. We encourage future research to shed more light on the boundary conditions and the mechanisms that influence how HRM systems and processes and different leadership approaches operate in empowering and, hence, motivating employees to enact proactive behaviour enhancing performance. In addition, investigating the interactions between additional factors and possible configurations via advanced methods, such as Qualitative Comparative Analysis, could be helpful in this regard (Greckhamer, Furnari, Fiss, & Aguilera, 2018). Future research should also focus on the other scenarios proposed by Leroy et al. (2018) in order to investigate the interplay between HRM practices and leadership with respect to workplace proactivity.

5.7 Management implications

Our findings have a number of practical implications for HR staff and departments, organizational leaders, and employees who need to be more responsive and proactive with respect to the challenges presented by an increasingly agile and dynamic work environment fuelled by new technology, artificial intelligence, and digitalization.

First, in order to improve work proactivity, it is important for organizations to identify the stimulating and detrimental factors in the contemporary work environments. They should act wisely when adopting HRM programmes that promote workplace flexibility, autonomy, and unlimited access to knowledge. Workplace flexibility is an important enabler in modern workplaces but has no motivational potential regarding workplace proactivity. In addition, although employees' psychological empowerment and proactive work behaviour can be enhanced through professional autonomy and access to knowledge via ICT, there are limits to what autonomy can achieve.

Second, employees should feel empowered by both the systems and the processes in an organization as well by the individual leader. Professional autonomy is important, but managing people remotely is not enough. In order to demonstrate autonomous workplace proactivity, employees must be given autonomy, flexibility, and access to information (i.e., a feeling of being trusted) to feel empowered. As this empowerment is especially important in virtual settings (Spreitzer, 2008), management and HR departments should take this into account as many employees are currently forced to work more remotely and in virtual settings due to the Covid-19 pandemic.

Third, team leaders and supervisors have a critical role in promoting psychological empowerment and thus positive workplace proactivity among employees whose work is characterized by a high degree of professional autonomy in the context of new ways of working. In particular, organizations should encourage their team leaders and supervisors to develop and demonstrate empowering leadership behaviour and to engage in relationships with their employees, so that employees feel that they are supported and also valued. This is pertinent not only for maintaining a healthy and productive work context for employees, but also for attracting and retaining talent (Ehnert, Harry,& Zink, 2014b).

Finally, managers should be aware that enhancing empowering elements in the work context may be fruitful as empowered employees have greater authority and responsibility for their work in terms of maintaining meaning in their work and having an impact at work. Our study provides additional insights into the empowerment process concerning factors which can enhance proactivity. Employees' workplace proactivity is crucial for organizational success, given the increased uncertainty that characterizes the contemporary world of work where change is ever present and where flexibility is continuously needed. To conclude, organizations that aim to increase employees' proactivity need to invest in HRM practices and forms of leadership that support employees and make them feel psychologically empowered.

References

Ahearne, M., Mathieu, J., & Rapp, A. (2005). To empower or not to empower your sales force? An empirical examination of the influence of leadership empowerment behavior on customer satisfaction and performance. *Journal of Applied Psychology*, *90*(5), 945-955.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modelling in practice: A review and recommended two-step approach. *Psychological bulletin*, 103(3), 411-423.

Appelbaum, E., Bailey, T., Berg, P. B., Kalleberg, A. L., & Bailey, T. A. (2000). *Manufacturing advantage: Why high-performance work systems pay off*. NY, Ithaca: Cornell University Press.

Arefin, M. S., Arif, I., & Raquib, M. (2015). High-performance work systems and proactive behavior: The mediating role of psychological empowerment. *International Journal of Business and Management*, *10*(3), 132-140.

Arnold, J. A., Arad, S., Rhoades, J. A., & Drasgow, F. (2000). The empowering leadership questionnaire: The construction and validation of a new scale for measuring leader behaviors. *Journal of Organizational Behavior*, *21*(3), 249-269.

Audenaert, M., Vanderstraeten, A., & Buyens, D. (2017). When affective well-being is empowered: The joint role of leader-member exchange and the employment relationship. *The International Journal of Human Resource Management*, 28, 2208-2227.

Baane, R., Houtkamp, P., & Knotter, M. (2011). *The new world of work unravelled: About bricks, bytes and behavior. (In Dutch: Het nieuwe werken ontrafeld: over de bricks, de bytes en het gedrag)*. Assen: Uitgeverij Van Gorcum.

Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing construct validity in organizational research. *Administrative Science Quarterly*, *36*(3), 421-458.

Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, *22*(3), 309-328.

Bakker, A. B., Tims, M., & Derks, D. (2012). Proactive personality and job performance: The role of job crafting and work engagement. *Human Relations*, *65*(10), 1359-1378.

Bandura, A. (1986). *Social foundations of thought and action: a social cognitive theory.* Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (2002a). Growing primacy of human agency in adaptation and change in the electronic era. *European Psychologist*, *7*(1), 2–16.

Barclay, D., Higgins, C., Thompson, R. (1995). The Partial Least Squares (PLS) Approach to Causal Modeling: Personal Computer Adoption and Use as an Illustration. *Technology Studies*, *2*(2), 285-309.

Bateman, T. S., & Crant, J. M. (1999). Proactive behavior: Meaning, impact, recommendations. *Business Horizons*, *42*(3), 63-70.

Batistič, S., Černe, M., Kaše, R., & Zupic, I. (2016). The role of organizational context in fostering employee workplace proactivity: The interplay between HR system configurations and relational climates. *European Management Journal*, *34*(5), 579-588.

Bijl, D. (2009). *Starting with New Ways of Working.* (In Dutch: Aan de slag met Het Nieuwe Werken*).* Zeewolde: Par CC.

Bindl, U. K., & Parker, S. K. (2011). Proactive work behavior: forward-thinking and change-oriented action in organizations. In S. Zedeck (Ed.), *APA handbook of industrial and organizational psychology* (pp. 567–598). Washington, DC: American Psychological Association. https://doi:10.1037/12170-019

Binyamin, G., & Brender-Ilan, Y. (2018). Leaders' language and employee proactivity: Enhancing psychological meaningfulness and vitality. *European Management Journal, 36(*4), 463-473.

Bowen, D. E., & Lawler, E. E. (1992). The empowerment of service workers: What, why, how and when. *Sloan Management Review*, *33*(3), 31-39.

Bowen, D. E., & Ostroff, C. (2004). Understanding HRM–firm performance linkages: The role of the "strength" of the HRM system. *Academy of Management Review, 29*, 203-221.

Carless, S. A. (2004). Does psychological empowerment mediate the relationship between psychological climate and job satisfaction? *Journal of Business and Psychology, 18*, 405-425.

Cañibano, A. (2019). Workplace flexibility as a paradoxical phenomenon: Exploring employee experiences. *Human Relations*, *72*(2), 444-470.

Chen, M., Lyu, Y., Li, Y., Zhou, X., & Li, W. (2017). The impact of high-commitment HR practices on hotel employees' proactive customer service performance. *Cornell Hospitality Quarterly*, *58*(1), 94-107.

Chen, G., Smith, T. A., Kirkman, B. L., Zhang, P., Lemoine, G. J., & Farh, J. L. (2019). Multiple team membership and empowerment spill over effects: Can empowerment processes cross team boundaries? *Journal of Applied Psychology*, *104*(3), 321-340.

Chin, W. W. (1998). The partial least squares approach to structural equation modelling. In Marcoulides, G. A. (Ed.). *Modern methods for business research. Modern methods for business research* (pp. 295-336). Hillsdale, NJ: Lawrence Erlbaum Associates.

Clegg, C., & Spencer, C. (2007). A circular and dynamic model of the process of job design. *Journal of Occupational and Organizational Psychology*, *80*, 321-339.

Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: Integrating theory and practice. *Academy of Management Review*, *13*(3), 471-482.

Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155-159.

Cooper, C. D., & Kurland, N. B. (2002). Telecommuting, professional isolation, and employee development in public and private organizations. *Journal of Organizational Behavior*, *23*(4), 511-532.

Coun, M.J.H., Peters, P., & Blomme, R.J. (2019). 'Let's share!' The mediating role of employees' self-determination in the relationship between transformational and shared leadership and perceived knowledge sharing among peers. *European Management Journal*, *37*(4), 481-491.

Coun, M.J.H., Gelderman, C. J., & Pérez Arendsen, J. (2015). Shared leadership and proactivity in New Ways of Working (In Dutch: Gedeeld leiderschap en proactiviteit in Het Nieuwe Werken). *Gedrag & Organisatie*, *28*(4), 356-379.

Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, 26(3), 435-462.

Deci, E. L. & Ryan, R.M. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54-67.

Ehnert, I., Harry, W., & Zink, K. J. (2014b). Sustainability and HRM: an introduction to the field. In I. Ehnert, W. Harry, & K. J. Zink (Eds.), *Sustainability and human resource management: Developing sustainable business organizations* (pp. 3 – 32). Heidelberg: Springer.

Ehrnrooth, M., Barner-Rasmussen, W., Koveshnikov, A., & Törnroos, M. (2020). A new look at the relationships between transformational leadership and emplfoyee attitudes—Does a high-performance work system substitute and/or enhance these relationships? *Human Resource Management*. doi/10.1002/hrm.22024

Fernandez, S., & Moldogaziev, T. (2012). Using employee empowerment to encourage innovative behavior in the public sector. *Journal of Public Administration Research and Theory*, *23*(1), 155-187.

Fong, K. H., & Snape, E. (2015). Empowering Leadership, Psychological Empowerment and Employee Outcomes: Testing a Multi-level Mediating Model. *British Journal of Management*, *26*(1), 126-138.

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, *18*, 382-388.

Frese, M., & Fay, D. (2001). Personal initiative: An active performance concept for work in the 21st century. *Research in Organizational Behavior*, *23*, 133–187.

Gagné, M., & Vansteenkiste, M. (2013). Self-determination theory's contribution to positive organizational psychology. In A.B. Bakker (Ed.), *Advances in positive organizational psychology* (pp. 61–82). Bingley: Emerald Group Publishing.

Gerdenitsch, C., Kubicek, B., & Korunka, C. (2015). Control in Flexible Working Arrangements. *Journal of Personnel Psychology*, *14*(2), 61 -69.

Gist, M. E., & Mitchell, T. R. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. *Academy of Management Review, 17*, 183-211.

Greckhamer, T., Furnari, S., Fiss, P. C., & Aguilera, R. V. (2018). Studying configurations with qualitative comparative analysis: Best practices in strategy and organization research. *Strategic Organization*, *16*(4), 482-495.

Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, *16*(2), 250-279.

Harman, H. H. (1976). *Modern factor analysis*. University of Chicago Press.

Henseler, J. (2010). On the convergence of the partial least squares path modeling algorithm. *Computational Statistics*, *25*(1), 107-120.

Herzberg, F., Mausner, B., & Snydermann B. (1959). *The motivation to work*. New York: Wiley.

Hill, E., Grzywacz, J. G., Allen, S., Blanchard, V. L., Matz-Costa, C., Shulkin, S., & Pitt-Catsouphes, M. (2008). Defining and conceptualizing workplace flexibility. *Community, Work and Family*, *11*(2), 149-163.

Hill, N. S., & Bartol, K. M. (2016). Empowering leadership and effective collaboration in geographically dispersed teams. *Personnel Psychology*, *69*(1), 159-198.

Houghton, J. D., & Yoho, S. K. (2005). Toward a contingency model of leadership and psychological empowerment: when should self-leadership be encouraged? *Journal of Leadership & Organizational Studies, 11*, 65-83.

Hu, L. T., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to under parameterized model misspecification. *Psychological Methods, 3*, 424-453.

Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual work design features: a meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology, 92*, 1332-1356.

Jo, H., Aryee, S., Hsiung, H. H., & Guest, D. (2020). Fostering mutual gains: Explaining the influence of high-performance work systems and leadership on psychological health and service performance. *Human Resource Management Journal, 30*, 198-225.

Kelliher, C., & Anderson, D. (2010). Doing more with less? Flexible working practices and the intensification of work. *Human Relations*, *63*(1), 83-106.

Kim, M., Beehr, T. A., & Prewett, M. S. (2018). Employee responses to empowering leadership: A meta-analysis. *Journal of Leadership & Organizational Studies*, *25*(3), 257-276.

Kubicek, B., Paskvan, M., & Bunner, J. (2017). The bright and dark sides of job autonomy. In C. Korunka, & B. Kubicek (Eds.), *Job demands in a changing world of work: Impact on workers' health and performance and implications for research and practice* (pp. 45–63). Cham, Switzerland: Springer.

Leach, D. J., Wall, T. D., & Jackson, P. R. (2003). The effect of empowerment on job knowledge: An empirical test involving operators of complex technology. *Journal of Occupational and Organizational Psychology*, *76*(1), 27-52.

Lee, A., Willis, S., & Tian, A. W. (2018). Empowering leadership: A meta-analytic examination of incremental contribution, mediation, and moderation. *Journal of Organizational Behavior*, *39*(3), 306-325.

Lee, H. W., Pak, J., Kim, S., & Li, L. Z. (2019). Effects of human resource management systems on employee proactivity and group innovation. *Journal of Management*, *45*(2), 819-846.

Leroy, J., Segers, J., Van Dierendonck, D., & Den Hartog, D. (2018). Managing people in organizations: Integrating the study of HRM and leadership, *Human Resource Management Review*, *28*(3), 249-257.

Liu, Y., & DeFrank, R. S. (2013). Self-interest and knowledge-sharing intentions: the impacts of transformational leadership climate and HR practices. *The International Journal of Human Resource Management*, *24*(6), 1151-1164.

Locke, E. A., & Latham, G. P. (2006). New directions in goal-setting theory. *Current Directions in Psychological Science*, *15*(5), 265-268.

Martin, S. L., Liao, H., & Campbell, E. M. (2013). Directive versus empowering leadership: A field experiment comparing impacts on task proficiency and proactivity. *Academy of Management Journal*, *56*(5), 1372-1395.

Maynard, M. T., Gilson, L. L., & Mathieu, J. E. (2012). Empowerment—fad or fab? A multilevel review of the past two decades of research. *Journal of Management*, *38*(4), 1231-1281.

Menon, S. (2001). Employee empowerment: An integrative psychological approach. *Applied Psychology*, *50*(1), 153-180.

Mintzberg, H. (1979). *The structuring of organizations*. Engle-wood Cliffs. J: Prentice-Hall.

Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, *91*(6), 1321-1339.

Nunnally, J. C. (1978). *Psychometric theory (2nd edition)*. New York: McGraw-Hill.

Nishii, L. H., & Wright, P. M. 2008. Variability within organizations: Implications for strategic human resources management. In D. B. Smith (Ed.), *The people make the place: Dynamic linkages between individuals and organizations* (pp. 225-248). Mahwah, NJ: Erlbaum.

Oldham, G. R., & Da Silva, N. (2015). The impact of digital technology on the generation and implementation of creative ideas in the workplace. *Computers in Human Behavior*, *42*, 5-11.

Parker, S. K., & Collins, C. G. (2010). Taking stock: Integrating and differentiating multiple proactive behaviors. *Journal of Management*, *36*(3), 633-662.

Parker, S. K., Bindl, U. K., & Strauss, K. (2010). Making things happen: A model of proactive motivation. *Journal of Management*, *36*(4), 827-856.

Parker, S. K., Williams, H. M., & Turner, N. (2006). Modelling the antecedents of workplace proactivity at work. *Journal of Applied Psychology*, *91*(3), 636-652.

Parker, S. K., & Wu, C. H. (2014). Leading for proactivity: How leaders cultivate staff who make things happen. In D. Day (Ed.), *The Oxford handbook of leadership and organizations (*pp. 380-405). Oxford, UK: Oxford University Press.

Peters, P., Den Dulk, L., & van der Lippe, T. (2009). The effects of workplace flexibility and new working conditions on employees' work–life balance: the Dutch case. *Community, Work & Family*, *12*(3), 279-297.

Peters, P., Poutsma, E., Van der Heijden, B. I., Bakker, A. B., & Bruijn, T. D. (2014). Enjoying new ways to work: An HRM-process approach to study flow. *Human Resource Management*, *53*(2), 271-290.

Peters, Ligthart, Bardoel & Poutsma (2016) 'Fit' for telework'? Cross-cultural variance and task-control explanations in organizations' formal telework practices, *The International Journal of Human Resource Management, 27*(21), 2582-2603.

Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: problems and prospects. *Journal of Management*, *12*(4), 531-544.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879-903.

Quiñones, M., Van den Broeck, A., & De Witte, H. (2013). Do job resources affect work engagement via psychological empowerment? A mediation analysis. *Revista de Psicología del Trabajo y de las Organizaciones, 29*, 127-134.

Rank, J., Carsten, J. M., Unger, J. M., & Spector, P. E. (2007). Proactive customer service performance: Relationships with individual, task, and leadership variables. *Human Performance*, *20*(4), 363-390.

Raub, S., & Robert, C. (2010). Differential effects of empowering leadership on in-role and extra-role employee behaviors: Exploring the role of psychological empowerment and power values. *Human Relations, 63*(11), 1743-1770.

Ringle, C. M., Wende, S., & Becker, J.M. (2015). *SmartPLS 3. Boenningstedt: SmartPLS GmbH.* Retrieved Retrieved November 6, 2018 from: http://www.smartpls.com

Root, L. S., & Young Jr, A. A. (2011). Workplace flexibility and worker agency: finding short-term flexibility within a highly structured workplace. *The Annals of the American Academy of Political and Social Science*, *638*(1), 86-102.

Sardeshmukh, S. R., Sharma, D., & Golden, T. D. (2012). Impact of telework on exhaustion and job engagement: A job demands and job resources model. New Technology, *Work and Employment*, 27(3), 193-207.

Schilpzand, P., Houston, L., & Cho, J. (2018). Not too tired to be proactive: Daily empowering leadership spurs next-morning employee proactivity as moderated by nightly sleep quality. *Academy of Management Journal*, *61*(6), 2367-2387.

Seibert, S. E., Wang, G., & Courtright, S. H. (2011). Antecedents and consequences of psychological and team empowerment in organizations: a meta-analytic review. *Journal of Applied Psychology*, *96*(5), 981-1003.

Sharma, P. N., & Kirkman, B. L. (2015). Leveraging leaders: A literature review and future lines of inquiry for empowering leadership research. *Group & Organization Management*, 40(2), 193-237.

Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, *38*(5), 1442-1465.

Spreitzer, G.M. (1996). 'Social structural characteristics of psychological empowerment', *Academy of Management Journal*, *39*(2), 483–504.

Spreitzer, G. M. (2007). Toward the integration of two perspectives: A review of social-structural and psychological empowerment at work. In C. Cooper, & J. Barling (Eds.), *The Handbook of Organizational Behavior* (pp. 1–41). Thousand Oaks, CA: Sage.

Spreitzer, G. M. (2008). Taking stock: A review of more than twenty years of research on empowerment at work. *Handbook of Organizational Behavior*, *1,* 54-72.

Stiglbauer, B., & Kovacs, C. (2018). The more, the better? Curvilinear effects of job autonomy on well-being from vitamin model and PE-fit theory perspectives. *Journal of Occupational Health Psychology*, *23*(4), 520-536.

Ten Brummelhuis, L. L., Bakker, A. B., Hetland, J., & Keulemans, L. (2012). Do new ways). Do new ways of working foster work engagement? *Psicothema*, *24*(1), 113-120.

Thomas, K. W., & Velthouse, B. A. (1990). Cognitive elements of empowerment: An "interpretive" model of intrinsic task motivation. *Academy of Management Review*, *15*(4), 666-681.

Van der Heijden, B. I. J. M., Peters, P., & Kelliher, C. (2014). New ways of working and employability. Towards an agenda for HRD. In R.F. Poell, T.S. Rocco, & G.L. Roth (Eds.). (2014). *The Routledge Companion to Human Resource Development* (pp. 542-551). London, UK: Routledge.

Weick, K. E. 1995. *Sensemaking in organizations*. London: Sage.

Wynarczyk, P. (2005). The impact of connectivity technologies on e-flexible working practices of small and medium-sized enterprises in the North East of England. *New Technology, Work and Employment, 20*(3), 234-247.

Zhang, X., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of Management Journal*, *53*(1), 107-128.

CHAPTER 6

Conclusions and discussion

6.1 Introduction

Over the last few decades, organizations have shown a growing interest in New Ways of Working (NWW). New Ways of Working reflects a new way of designing work activities based on a workforce philosophy (values, assumptions and beliefs about employees) that is highly employee-centred (Bijl, 2009). In NWW contexts, employees have more freedom - within certain limits - to determine 'how they work, where they work, and with whom they work' (Bijl, 2009, p. 27). This increased workplace flexibility has been associated with more radical changes in workplace designs (Peters, Poutsma, Van der Heijden, Bakker, & De Bruijn, 2014). Greater professional autonomy and accountability for employees, who are often working in (virtual) teams, runs parallel with free access to and use of knowledge. Consequently, employees have to rely more on self-management. This, in turn, demands more workplace proactivity – for example, in terms of knowledge sharing between workers, an important way in which contemporary organizations stay competitive (Bruyne & Gerritse, 2018; Parker & Bindl, 2016). Ultimately, the intended outcome of NWW is to empower and engage individuals in their work (Bijl, 2009).

Previous research has acknowledged the importance of NWW and has addressed both its positive and negative consequences. Most commonly, researchers have focused on the physical work environment and the technological and ICT aspects of NWW (cf. Aroles, Mitev, & Vaujanie, 2019; De Menezes & Kelliher, 2011). The research in this field has not tended to take into account employees' work-relationships, workplace proactivity, or the managerial aspects of NWW. The more behavioural aspects of NWW that are related to the empowerment of employees (i.e., professional autonomy and accountability; output-management), require different types of leadership approaches. There is, however, also a lack of academic research on the shifting role of leadership in these contexts. Moreover, little attention has been paid to the underlying mechanism explaining what motivates and triggers employees to display the desired workplace proactivity in NWW contexts.

Building on both the Human Resource Management (HRM) and the leadership literature, the aim of this dissertation was to enrich the scholarly and management literature on NWW in modern organizations by examining the relationships between perceived HRM practices and leadership styles associated with NWW and employees' workplace proactivity. Furthermore, we explored how this relationship is mediated by psychological empowerment including self-determination. Self-determination theory (SDT) (Deci & Ryan, 2000; Ryan, & Deci, 2017) and the closely related concepts of structural and psychological empowerment (Spreitzer, 1995) were chosen as a lens through which to examine the core concepts explored in this thesis as all of which rely upon the autonomous motivation of employees to perform.

In light of the research summary outlined above, the central research question addressed in this dissertation was: '*To what extent are perceived HRM practices and leadership related to workplace proactivity, and to what extent do self-determination and psychological empowerment mediate these relationships?*'

This central research question was divided in four sub-questions which were addressed in four separate studies. In the following section, the four studies are summarized.

6.2 Main findings

The first research question was addressed in Study 1 (Chapter 2):

> *'What is the potential contribution of perceived HRM practices and leadership approaches associated with NWW in fostering workplace proactivity, and how can self-determination theory help to explain these relationships?'*

The aim of this conceptual study was to gain a deeper understanding of the contribution of HRM practices and leadership approaches related to NWW, and how these can stimulate workplace proactivity. We first conceptualized NWW as the adoption of HRM work (design) practices: time-spatial flexibility, professional autonomy, and access to knowledge via ICT. We concluded that these work practices are necessary conditions for an effective HRM system that can empower employees enhancing their workplace proactivity in order to stimulate creativity, innovation and personal development.

Second, we found that HRM practices supporting NWW have the potential to contribute to employees' psychological needs satisfaction at work, thus promoting self-determination and hence workplace proactivity. Employees are motivated and inspired by HRM practices such as time and spatial flexibility, professional autonomy, and having access to information, because they contribute to the fulfilment of basic psychological needs. Self-determination theory provides a framework to explore the mechanisms underlying the effect of HRM practices on workplace proactivity.

Third, we found that leadership as a management practice (within the NWW context) can be a powerful connection for the HRM system and can help to identify which kind of leadership is appropriate in NWW contexts. We explored leadership styles and approaches within the context of NWW, and linked them to employees' motivation. We examined the role and the appropriateness of transformational, transactional, shared, and empowering leadership approaches. The appropriateness of a leadership style was

evaluated by assessing the fit with HRM practices related to NWW and their contribution to self-determination and need fulfilments. In addition, we explored the link between hierarchical, vertical and horizontal leadership approaches. To a large extent, the propositions presented in this study were put to the test in the empirical papers presented in this dissertation.

In Study 2 (Chapter 3), the second research question was addressed:

> *'To what extent are NWW and shared leadership related to workplace proactivity? What are the differences in terms of workplace proactivity and shared leadership between employees that have access to NWW practices and those who do not?'*

The aim of the study was to investigate the relationship between working in an NWW environment, shared leadership, and proactivity. We hypothesized that NWW would combine well with shared leadership. Similarly, a positive relationship was expected between NWW and both individual and team workplace proactivity. Within the context of NWW, teams have greater flexibility, autonomy, and the possibility to organize their work in an independent manner. Therefore, a quasi-experimental research design was set up in which NWW employees were compared with employees who had not (yet) adopted NWW. Survey data were collected from two groups of employees in a large banking and insurance company in the Netherlands.

In contrast to expectations, no significant relationship was found between employees who already had access to NWW and shared leadership. However, positive correlations were found for work principles of NWW related to 'human factors and attitudes' such as giving feedback, providing autonomy and responsibility, and entrepreneurship. With some caution, we can suggest that 'human factors and attitudes' are at least as important for the adoption of NWW as 'facilitating ICT' and 'offering a flexible work environment'. This study confirmed that working in a NWW context is positively associated with team workplace proactivity, although there was no direct relationship with the individual workplace proactivity of employees. However, mediation analysis revealed that employees working according the principles of NWW displayed higher levels of workplace proactivity related to the team, which in turn, had a positive association with individual workplace proactivity. When workplace proactivity is evident in teams, this will also motivate individual team members to exhibit workplace proactivity. We found that merely implementing NWW does not result in shared leadership, although working in teams is a logical consequence of the opportunities offered by NWW. The findings of this study underlined the importance of further understanding the mechanisms underlying employee motivation. They also highlight the need to reflect on the role of the hierarchical leader.

In Study 3 (Chapter 4) we addressed the following research question:

'To what extent do shared leadership and the transformational leadership style of the hierarchical leader relate to knowledge sharing behaviour among peers, and what is the mediating role of self-determination via the fulfilment of employees' basic psychological needs in this relationship?'

The aim of this study was to investigate the contribution of both shared leadership and transformational leadership of the hierarchical leader on employees' knowledge sharing within NWW contexts. Knowledge sharing has become a major risk factor in NWW where digital collaboration is a common practice. Survey-data were obtained from professionals working in two R&D units of a company in the foods for special medical purposes sector in the Netherlands, who had already adopted NWW. The professional knowledge workers in this company collaborate in teams for which they are jointly held responsible and for which sharing knowledge is vital to new product development.

The results showed that in NWW contexts shared leadership is the most important single factor related to employees' motivation to share knowledge among peers, both directly and indirectly via employees' satisfaction of the need for autonomy. The transformational leadership style of the hierarchical leader was also found to have a positive relationship with employees' knowledge sharing, but only via shared leadership. In contrast to our expectations, we did not find a mediation effect for psychological needs satisfaction for relatedness between leadership and knowledge sharing. However a positive trend could be seen from both shared and transformational leadership towards the satisfaction of this need. Moreover, no mediation effect was found of psychological needs satisfaction for competence: neither shared leadership nor transformational leadership significantly affected competence satisfaction. In addition, the study demonstrated that colleagues and their peers, as well as their formal team leader, play a role in employees' feelings of autonomy and self-determination. This is important for the perception of the willingness to share knowledge among fellow employees.

In Study 4 (Chapter 5) the next research question was addressed:

'To what extent do empowering HRM practices (in this study professional autonomy, workplace flexibility and access to knowledge via ICT) and empowering leadership have the potential to foster workplace proactivity, and what is the mediating role of psychological empowerment in this relationship?'

The aim of this study was to investigate to what extent empowering HRM practices associated with NWW (i.e., workplace flexibility, professional autonomy, and access to knowledge via ICT) and empowering leadership have the potential to foster employees' workplace proactivity. An empowerment perspective contributes to a better understanding of how employees are able to make choices to achieve the goals set in their work and how leadership can support this. Survey-data were obtained from four subsidiaries of a large Dutch bank active in the financial sector in the Netherlands which has made the transformation to self-managing teams with greater autonomy.

First, the results showed that the relationship between professional autonomy as an HRM practice and workplace proactivity was partially mediated by psychological empowerment. Our results demonstrated that professional autonomy as an HRM practice that does *not* result in psychological empowerment will have a negative effect on work proactivity.

Second, the relationship between access to digital information supported by ICT technology and proactivity was shown to be fully mediated by psychological empowerment. The absence of a direct effect of access to knowledge via ICT implies that this HRM work practice is not sufficiently effective in terms of enhancing workplace proactivity when employees do not feel empowered.

Third, in contrast to prior expectations, workplace flexibility was neither directly nor indirectly associated with workplace proactivity. Finally, above and beyond professional autonomy and access to knowledge via ICT, we also found psychological empowerment plays an important mediating role in the relationship between empowering leadership and workplace proactivity. Hence, feeling supported by an empowering supervisor can indeed motivate employees, which in turn can foster their workplace proactivity. Finally, the additional analyses showed no significant interactions between each single HRM practice (i.e., workplace flexibility, professional autonomy, and access to information via ICT) and empowering leadership on psychological empowerment and on workplace proactivity. Hence we can conclude that HRM practices and empowering leadership are complementary as they combine different perspectives for employees.

6.3 Theoretical implications and contributions

This dissertation contributes to research on NWW (e.g., Baane, 2011; Jemine, Dubois, & Pichault, 2019; Peters et al. 2014) and flexible working (De Menezes & Kelliher, 2011; Gajendran & Harrison, 2007; Kelliher & De Menezes, 2019) by connecting the Human Resource Management (HRM) and the leadership literature. Research to date tends to focus on the physical and virtual dimensions of NWW, rather than on the behavioural

dimensions. This focus on the physical environment and the technological support seems to result in little attention being paid to the employee-work relationship, and how this relationship is managed. Moreover, researchers have merely investigated the work practices related to NWW as implemented (or intended to be implemented) by management - and not how they are perceived, interpreted and used by employees, all of which may change the anticipated work outcomes. In the following the theoretical contributions of this dissertation are discussed considering four topics.

Empowering HRM practices

This dissertation contributes to current insights by showing that NWW requires more than simply introducing remote working or digital systems. Most studies to date have focused on the HRM system and explored the impact of HRM practices such as reward systems, selection and training on workplace proactivity (e.g., Arefin, Arif, & Raquib, 2015; Batistič, Černe, Kaše, & Zupic, 2016; Chen, Lyu, Li, Zhou, & Li, 2017). These practices can often be used to monitor and indirectly control people (Peters, Ligthart, Bardoel, & Poutsma, 2016). In this dissertation, however, we explore the HRM practices that can be used to empower employees and foster proactivity.

The studies presented here provide empirical evidence for the role of the more behavioural aspects of NWW in fostering workplace proactivity. Workplace proactivity which is important for knowledge workers who are working in self-organizing and often virtual teams. This workplace proactivity has become increasingly important for its role in enhancing efficiency, creativity and innovation in contemporary organizations. The studies demonstrated that the adoption of NWW stimulates workplace proactivity (Study 2). Moreover, they uncover the crucial role of HRM practices - such as access to knowledge and particularly professional autonomy - in empowering employees and enhancing workplace proactivity in NWW settings (Study 4). However, the research presented here also shows that when employees are not able to cope with the autonomy offered by NWW, this will not enhance - and may even hinder - their proactivity (Study 4). The freedom that comes with NWW does not suit everyone; this might be related to a stronger need for structure or psychological safety in some individuals (Edmondson, 2002; Rietzschel, Slijkhuis, and Van Yperen, 2014). This discovery makes an important contribution to the work design literature, illustrating that merely implementing job autonomy as a HRM work practice - without some form of support or empowerment - does not automatically lead to workplace proactivity.

In addition, the absence of a direct effect of access to knowledge via ICT implies that this HRM practice is not sufficiently effective in terms of enhancing workplace proactivity when employees do not feel empowered. Moreover, workplace flexibility as a HRM practice did not seem to be a motivating factor working condition in our study. It would

appear that the implementation of workplace flexibility is not sufficient to enhance workplace proactivity, although it was not found to hinder workplace proactivity either. To achieve positive outcomes in NWW contexts, current theorizing efforts may benefit from taking on a behavioural approach in which the focus shifts towards the individual employee and to acknowledging the role of HRM practices as either a hygiene factor or a motivating factor (Herzberg, Mausner, & Snydermann, 1959).

Leadership within NWW context

In recent years, direct management control and steering has lost importance due the possibilities of remote and flexible working. As a result, attention is currently shifting to the role of leadership in NWW (cf. De Kok, 2016). To date, existing research on this topic has been scarce, and has tended to promote person-centred leadership (e.g., Stoffers, Kurstjens, & Schrijver, 2015), transformational leadership (Gerards, De Grip, & Baudewijns 2018) or particularly self-management (van der Meulen, 2016).

This dissertation extends this research, by acknowledging the role of shared leadership as an adjunct to hierarchical leadership within virtual and self-managing teams in NWW contexts. It is noteworthy that previous research on NWW and flexible work has not explored the role of shared leadership, so this thesis makes a new contribution to the field. Incorporating leadership and leadership approaches in NWW allowed us to understand and advocate a more nuanced view about the appropriateness of leadership at different levels. Horizontal and vertical leadership approaches are needed in organizations to encourage workplace proactivity in NWW. From Study 2 (Chapter 3) we learned that individual proactivity, which reflects self-management, can be enhanced by team proactivity, indicating that the role of team-members is important. However, merely implementing NWW does not automatically result in the sharing of leadership responsibilities among team members (Study 2, Chapter 3).

The empirical studies presented in this dissertation show that 'one size fits all' solutions are not sufficient to motivate employees to act in NWW. In addition to shared leadership, the traditional, vertical, hierarchical styles of leadership remain relevant and useful. This is illustrated by the finding that formal leadership can have a positive effect on perceived shared leadership. This interrelatedness of formal leadership (in our study, transformational leadership) and shared leadership was confirmed in Study 3 (Chapter 4), particularly in relation to satisfying employees' need for professional autonomy. As knowledge workers often work virtually or remotely, and have the psychological freedom to work when and where they want, particularly the need for autonomy might be important for creating some form of control in order to function. Shared leadership between team members and transformational leadership are also important in relation to satisfying the need for relatedness. These approaches generate an atmosphere of trust that can enhance

employees' individual feelings of belongingness but do not satisfy the need for competence. While it may be possible to stimulate shared leadership by enacting transformational leadership, hierarchical leaders also have an empowering role. The results of study 4 (Chapter 5) support the idea that empowering leaders play a role in enhancing proactivity by delegating their power and decision-making authority via psychological empowerment. Indeed, empowering leadership is more about giving influence to than having influence over (Yukl, 2010). These insights are important as it has already been argued that one of the barriers to NWW is a lack of fit with the management in relation to leadership style (De Kok, 2016; Van der Meulen, 2016).

This dissertation also contributes to the leadership literature (Hoch, 2014; Hoch, & Dulebohn, 2017; Houghton, Pearce, Courtright, & Stewart, 2015; Hsu, Li, & Sun, 2017) by providing empirical evidence for the interrelatedness of transformational and shared leadership as empowering leadership styles in NWW contexts. In addition, our study adds to the literature by further exploring the relationship between empowering leadership and proactivity (Kim, Beer, & Prewett, 2018; Martin, Liao, & Campbell, 2013; Schilpzand, Houston, & Cho, 2018), and is the first to demonstrate that psychological empowerment serves as a mediating mechanism. And finally, our research acknowledges and explores the role of needs satisfaction. Prior to our research, this link with needs satisfaction was non-existent in shared leadership research (Hoch & Kozlowski, 2014; Wu, Cormican, & Chen, 2020), which to date has mainly focused on aspects of inclusion and virtual distance.

Self-determination and psychological empowerment as underlying mechanisms
This dissertation contributes to our understanding of how HRM practices and leadership are related to workplace proactivity in NWW. Currently, there is little discussion of the theoretical underpinnings of these effects in the literature on flexible work practices (e.g., De Menezes & Kelliher, 2011; Gagendran & Harrison, 2007; Kelliher & De Menezes, 2019) and NWW (e.g., Aroles, et al., 2019; Van der Heyden et al., 2014; Van Steenbergen et al., 2018). Most commonly, the job demands- job resources model has been used to explain why NWW is effective (Peters et al., 2014; Van Steenbergen, Van der Ven, Peeters, & Taris, 2018). However, we posit that self-determination theory and theories of psychological empowerment can also contribute to our understanding by focusing on the motivation of employees, bearing in mind that the goal of NWW is to empower employees.

The psychological motivation theories outlined above provide more insights into how HRM practices and leadership behaviour can influence employees' perceptions of self-determination and empowerment, which in turn affects their behaviour. SDT argues that people act in order to develop themselves, but that there are environmental factors that can promote but also disrupt this process. Employees will search their work environment for ways in which to satisfy their basic psychological needs. In Study 3, we found that

self-determination mediates the relationship between leadership (transformational and shared), and knowledge sharing, particularly by responding to employees' needs for psychological freedom (autonomy) and relatedness. In study 4, we found that psychological empowerment is an important mediator in the relationship between HRM practices, empowering leadership and workplace proactivity.

In this regard, SDT and psychological empowerment theory provide the necessary theoretical underpinnings to explain how employees are motivated to behave proactively. After all, a balanced system of NWW elements enables workers to satisfy their psychological needs, which can in turn motivate employees and influence work-related outcomes, such as knowledge sharing and workplace proactivity. However, the studies presented here also emphasize that not everyone prioritizes and satisfies his or her psychological needs in the same way. Of particular importance is the role that psychological empowerment plays in the empowerment process. The functioning of empowerment differs from employee to employee. This is a result of individual interpretation regarding the practices, policies, and forms of leadership within an employee's work context. This interpretation may also affect the employee's psychological state. The empowerment process can, in this way, be seen as a sense-making process (Nishii &Wright, 2008; Weick, 1995).

Bridging HRM and leadership literature in NWW

Previous research on employees' proactivity has mainly focused either on the HRM system or on HRM practices (cf. Arefin, Arif, & Raquib, 2015; Chen, Smith, Kirkman, Zhang, Lemoine, & Farh, 2017; Lee, Pak, Kim, & Li, 2019), or on the role of the empowering leader (cf. Martin, Liao, & Campbell, 2014; Schilpzand et al., 2018). Few HRM studies have paid attention to the role of leadership in NWW. We found that, in addition to HRM practices, considering leadership as a management practice within the NWW context can make a powerful connection between the HRM and the leadership (Study 1, Chapter 2). Whilst leadership can empower and stimulate via the leader or via colleagues, HRM empowers through systems and processes. We found that both perspectives can contribute to our understanding of how employees in NWW contexts can be motivated to display workplace proactivity.

In summary, our empirical studies have emphasized the role of both *HRM and leadership* in motivating employees in modern organizations to cope with - and perceive the benefits of - NWW. Our studies have connected the HRM and the leadership literature, enhancing our understanding of how both HRM and leadership can contribute to the empowerment of employees in displaying workplace proactivity (Leroy, Segers, Van Dierendonck, & Den Hartog, 2018). The results show that although HRM and leadership are two different and clearly distinguishable subdomains from the perspective of employees, both can guide

and shape employees' behaviour in organizations. HRM practices, such as providing access to knowledge and enabling professional autonomy, focus on processes and systems, and may indeed foster employees' motivation and workplace proactivity. However, these employee outcomes also require appropriate leadership which is more closely related to the individual employee. In this dissertation, we argue that HRM and leadership are not mutually exclusive but complementary, and in combination can stimulate employees to display proactive workplace behaviour. These findings increase our understanding of the role of both HRM and leadership in NWW.

6.4 Limitations and avenues for future research

While we have already discussed the limitations of each particular study in previous chapters, here we outline some more general limitations and make suggestions for future research.

First, the cases investigated in this dissertation are of single organizations which have started working according the principles of new ways of working. We had the opportunity to access highly-skilled knowledge workers in the R&D sector and the financial sector. An advantage of conducting our studies within a single organization was that we reduced the probability of other factors (e.g., context) potentially introducing bias. One could expect that the outcomes of our study have relevance for many other highly educated knowledge workers working in different domains, and this would be worth following up. It would also be worthwhile to explore the dynamics that develop when employees are obliged or forced to work remotely almost full-time – for example, due to the Covid-19 pandemic. Due to this crisis, there has been a renewed focus on remote working and an acknowledgement that we need to rethink and reflect on new ways of (virtual) working and leadership. Future research could explore to what extent organizations that have embraced NWW and teleworking during the Covid-19 crisis will continue these practices.

Second, because we used cross-sectional research designs for our studies, the dynamic interplay between HRM practices and leadership approaches and styles could not be studied, and this precluded the determination of causal relationships. Research approaches such as longitudinal studies are needed to draw firm conclusions about causal relationships. In line with this, as modern work is changing so rapidly in response to organizational and environmental developments, it would be worthwhile to examine how employees' attitudes towards work change at different stages of the implementation of NWW. Future studies should analyse the positive and negative consequences of implications of remote working and how the situation evolves over time.

Third, data collected in this dissertation were gathered by means of self-reports. It has been argued that surveys and self-reports are appropriate methods for investigating perceptions of individual needs (in this case as related to implemented HRM practices and leadership) (Cullen, Edwards, Casper, & Gue, 2014). Nevertheless, future research could use additional methods of collecting data to further elaborate on the nature of these relationships. Since little is known about the actual use of leadership behaviours, qualitative case study research could address some of the gaps in our understanding of NWW practices. After all, empowerment in NWW is about the distribution of power within organizations; authority, autonomy, and responsibility have to be delegated to employee levels. However, some people may not give up their control and power easily. Future research could further explore what the consequences of this power distribution are in terms of working conditions, how this affects the empowerment of employees, and the relationship between employees and the manager.

Fourth, although team work is important in the context of NWW, individual employees could not be linked to single teams in our studies. However, multilevel analysis in the context of NWW has shown that the empowerment experiences of employees at the individual level do not necessarily match those of managers when it comes to assessing the degree of empowerment resulting from empowering HRM practices and leadership. Much in line with the HRM process model developed by Nishii and Wright (2008), the correlation between intended and implemented HRM practices (in this case empowerment at the job level) and employee perceptions and experiences was not very high (cf. Peters, Poutsma, Van der Heijden, Bakker, & Bruijn, 2014).

Fifth, we have formulated propositions about leadership approaches related to empowering, transformational and transactional leadership of the formal leader and more team-focused shared approaches, all of which can be used to empower and support knowledge workers in NWW. However, our results showed that the freedom afforded by NWW does not suit everyone. Future research designs would benefit from incorporating directive and transactional leadership approaches, especially for employees who have a strong need for structure. It is also worth noting that different results may be found in situations in which NWW is not voluntary and employees are forced to work in this way (for example, due to the covid-19 pandemic). Future research should investigate the consequences of adjusted leadership approaches and mandatory teleworking on employees' work outcomes. In addition, future studies should take into account some of the more long-term effects of NWW, including those arising from professional isolation and social distancing within team collaborations.

Finally, our study has shed light on the role of both HRM practices and hierarchical and horizontal leadership styles in empowering employees to act in a proactive way - for

example, in terms of knowledge sharing. We argue that, in the context of NWW, HRM practices and leadership styles are complementary. We encourage future research to further investigate the impact of and the interaction with additional factors and possible configurations as suggested by Leroy et al. (2018) by using advanced methods such as Qualitative Comparative Analysis (Greckhamer, Furnari, Fiss, & Aguilera, 2018). A next step could be to formulate multiple leadership approaches comprising different behaviours that could generate optimal work-related outcomes in different circumstances.

6.5 Management Implications

The findings presented in this dissertation have a number of practical implications for HR staff and departments, organizational leaders, and employees. In the following section, we outline these and make some suggestions. Our findings may be particularly worthwhile and timely right now – whilst familiarity with remote working has increased over the years, the Covid-19 pandemic has further promoted and hastened the acceptance of HRM practices related to NWW among managers, employees, clients and household members.

First, it can be assumed that organizations who have embraced the HRM practices associated with NWW do so with the intention of providing their employees with more challenging and satisfying work. However, organizations should act wisely when adopting HRM programs that offer empowering HRM practices associated with NWW to their employees. Based on the results of Study 4 (Chapter 5), we can conclude that employees should feel empowered by the systems and the processes in place in an organization as well by the individual leader and co-workers. Workplace flexibility (as a HRM practice) is an important enabler in modern workplaces but has no motivational potential regarding workplace proactivity. Professional autonomy and access to knowledge are important, but not *per se*. These HRM practices can contribute to workplace proactivity only when employees feel psychologically empowered. In this regard, it is important to acknowledge that employees must have the feeling that they are part of the 'bigger picture'. They should feel in control and self-determinate in their behaviour, and have confidence that their work is meaningful and has an impact on the organization. There may be limits to what professional autonomy can achieve, as demonstrated in Study 4 (Chapter 5). Of further relevance are the results from Study 3 (Chapter 4), which show that shared leadership and formal team leadership play a role in employees' feelings of autonomy, self-determination and connectedness. In turn, feeling empowered and the feeling of self-determinate can contribute to employees' proactivity, for example in relation to knowledge sharing.

Second, in line with this, the results of the studies presented here suggest that employees who have to rely more on self-management also need some vertical and horizontal leadership support. Employees must be given autonomy, flexibility, and access to information (reflecting trust in workers) in order to feel empowered. However, managing people remotely is not enough. Coun, Gelderman, & Perez (2015) have demonstrated that merely implementing NWW does not result in shared leadership, although working in teams is a logical consequence of the opportunities offered by NWW. Rather, the team leader should play a role in stimulating shared leadership in self-organizing teams. Moreover, as employees gain more and more control and flexibility, it should be taken into consideration that not everyone may want - or can handle - a high level of autonomy, and some employees might need a kind of spokesperson. Study 4 (Chapter 5) of this dissertation shows that vertical empowering leadership can foster employees' sense of self-determination both directly and indirectly by delegating power to the employee. In addition, transformational leadership, embedded in and encouraged by the leadership of formal (team) leaders, is needed (Study 3, Chapter 4). Formal leaders can create a long-term vison, organize boundary-spanning activities intended to develop a common ground, and inspire and encourage those employees who do not share this sense of common ground by creating psychological identification. It is hoped that the insights presented here can help organizations to set up suitable leadership training programs.

Thirdly, organizations that wish to increase employees' workplace proactivity need to invest in HRM practices and forms of leadership that support employees and make them feel psychologically empowered. In this regard, it is important to focus on HRM practices and leadership styles that contribute to autonomous motivation, as employees will be more engaged in a work activity (NWW) which they have chosen to do (and not been directed or forced to carry out). We know from SDT (Deci & Ryan, 2000) that people usually act in order to develop themselves, but that the environment can provide structures and practices which can prompt or disrupt this process. HRM practices are an example of this in that they do not the same effect on everyone (see Study 4, Chapter 5). The degree to which an employee is autonomously or controlled motivated, depends on the extent to which an individual has internalized the motivation process in his or her social environment (Deci & Ryan, 2000. Van den Broeck, Vansteenkiste, Lens, & De Witte, 2010). It makes sense then to bear in mind that a 'one size fits all' approach is not appropriate. It is important to acknowledge the purpose of work or the idea that work can be fulfilling and meet basic human needs (see also Quené, 2018). Strategic HRM should therefore be aware of and pay more attention to the psychological processes and mechanisms that play a role in how employees develop themselves and integrate these new experiences. It is hoped that these insights can be used to develop more effective and sustainable HRM strategies which take into account the various HRM practices and leadership styles (and the interplay between them) set out in this thesis.

References

Arefin, M. S., Arif, I., & Raquib, M. (2015). High-performance work systems and proactive behavior: The mediating role of psychological empowerment. *International Journal of Business and Management*, *10*(3), 132-140.

Aroles, J., Mitev, N., & de Vaujany, F. X. (2019). Mapping themes in the study of new work practices. *New Technology, Work and Employment*, *34*(3) 285-299.

Baane, R. (2011). *The New Way of Working unraveled. About Bricks, Bytes & Behavior*. (In Dutch: Het Nieuwe Werken ontrafeld. Over Bricks, Bytes & Behavior). *Tijdschrift voor HRM*, *141*, 7-23.

Batistič, S., Černe, M., Kaše, R., & Zupic, I. (2016). The role of organizational context in fostering employee proactive behaviour: The interplay between HR system configurations and relational climates. *European Management Journal*, *34*(5), 579-588.

Bijl, D. (2009). *Starting with New Ways of Working*. (In Dutch: Aan de slag met Het Nieuwe Werken). Zeewolde: Par CC.

Chen, G., Smith, T. A., Kirkman, B. L., Zhang, P., Lemoine, G. J., & Farh, J. L. (2019). Multiple team membership and empowerment spill over effects: Can empowerment processes cross team boundaries? *Journal of Applied Psychology*, *104*(3), 321-340.

Chen, M., Lyu, Y., Li, Y., Zhou, X., & Li, W. (2017). The impact of high-commitment HR practices on hotel employees' proactive customer service performance. *Cornell Hospitality Quarterly*, *58*(1), 94-107.

Coun, M.J.H., Gelderman, C. J., & Pérez-Arendsen, J. (2015). Shared leadership and workplace proactivity in New Ways of Working (In Dutch: Gedeeld leiderschap en proactiviteit in Het Nieuwe Werken). *Gedrag & Organisatie*, *28*(4), 356-379.

Coun, M.J.H., Peters, P. , & Blomme, R.J. (2019). Let's share! The mediating role of employees' self-determination in the relationships between transformational and shared leadership and perceived knowledge sharing behaviour among peers. *European Management Journal*, *37*(4), 481-491.

Cullen, K. L., Edwards, B. D., Casper, W. C., & Gue, K. R. (2014). Employees' adaptability and perceptions of change-related uncertainty: Implications for perceived organizational support, job satisfaction, and performance. *Journal of Business and Psychology*, *29*(2), 269-280.

Deci, E. L., & Ryan, R. M. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, *25*(1), 54-67.

De Kok A. (2016) The New Way of Working: Bricks, Bytes, and Behavior (9-40). In J. Lee (Ed.) *The Impact of ICT on Work*. Singapore: Springer.

De Menezes, L. M., & Kelliher, C. (2011). Flexible working and performance: A systematic review of the evidence for a business case. *International Journal of Management Reviews*, *13*(4), 452-474.

Edmondson, A. C. (2002). *Managing the risk of learning: Psychological safety in work teams* (pp. 255-275). Cambridge, MA: Division of Research, Harvard Business School.

Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology*, *92*(6), 1524-1541.

Gerards, R., de Grip, A., & Baudewijns, C. (2018). Do new ways of working increase work engagement? *Personnel Review*, *47*(2), 517 -534.

Greckhamer, T., Furnari, S., Fiss, P. C., & Aguilera, R. V. (2018). Studying configurations with qualitative comparative analysis: Best practices in strategy and organization research. *Strategic Organization*, *16(*4), 482-495.

Herzberg, F., Mausner, B., & Snydermann B. (1959). *The motivation to work*. New York: Wiley.

Hoch, J. E. (2014). Shared leadership, diversity, and information sharing in teams. *Journal of Managerial Psychology*, *29*(5), 541-564.

Hoch, J. E., & Dulebohn, J. H. (2017). Team personality composition, emergent leadership and shared leadership in virtual teams: A theoretical framework. *Human Resource Management Review*, *27*(4), 678-693.

Hoch, J. E., & Kozlowski, S. W. (2014). Leading virtual teams: Hierarchical leadership, structural supports, and shared team leadership. *Journal of Applied Psychology*, *99*(3), 390-403.

Houghton, J. D., Pearce, C. L., Manz, C. C., Courtright, S., & Stewart, G. L. (2015). Sharing is caring: Toward a model of proactive caring through shared leadership. *Human Resource Management Review*, *25*(3), 313-327.

Hsu, J. S. C., Li, Y., & Sun, H. (2017). Exploring the interaction between vertical and shared leadership in information systems development projects. *International Journal of Project Management, 35*(8), 1557-1572.

Jemine, G., Dubois, C., & Pichault, F. (2019). From a new workplace to a new way of working: legitimizing organizational change. *Qualitative Research in Organizations and Management: An International Journa*l. https://doi 10.1108/QROM-10-2018-1690

Kelliher, C., & de Menezes, L. M. (2019). *Flexible Working in Organisations: A Research Overview*. London: Routledge.

Kubicek, B., Paskvan, M., & Bunner, J. (2017). The bright and dark sides of job autonomy. In C. Korunka, & B. Kubisec (Eds.), *Job demands in a changing world of work: Impact on workers' health and performance and implications for research and practice* (pp. 45–63). Cham, Switzerland: Springer.

Lee, H. W., Pak, J., Kim, S., & Li, L. Z. (2019). Effects of human resource management systems on employee proactivity and group innovation. *Journal of Management*, *45*(2), 819-846.

Leroy, J., Segers, J., Van Dierendonck, D., & Den Hartog, D. (2018). Managing people in organizations: Integrating the study of HRM and leadership, *Human Resource Management Review*, *28*(3), 249-257.

Martin, S. L., Liao, H., & Campbell, E. M. (2013). Directive versus empowering leadership: A field experiment comparing impacts on task proficiency and proactivity. *Academy of Management Journal*, *56*(5), 1372-1395.

Nishii, L. H., & Wright, P. M. (2008). Variability within organizations: Implications for strategic human resources management. In D. B. Smith (Ed.), *The people make the place: Dynamic linkages between individuals and organizations* (pp. 225-248). Mahwah, NJ: Erlbaum.

Parker, S. K., & Bindl, U. K. (2016). Proactivity at work: A big picture perspective on a construct that matters. In S.K. Parker, & Bindl, U. K. (Eds.) Proactivity at Work Making Things Happen in Organizations (pp.19-38). New York, USA: Routledge.

Parker, S. K., & Collins, C. G. (2010). Taking stock: Integrating and differentiating multiple proactive behaviors. *Journal of Management*, *36(*3), 633-662.

Peters, P., Ligthart, P. E., Bardoel, A., & Poutsma, E. (2016). 'Fit' for telework'? Cross-cultural variance and task-control explanations in organizations' formal telework practices. *The International Journal of Human Resource Management*, *27*(21), 2582-2603.

Peters, P., Poutsma E., Van der Heijden B., Bakker A.P. & De Bruijn, A. (2014). Enjoying new ways to work: An HRM-process approach to study flow. *Human Resource Management*, *53*(2), 271–290.

Quené, M. (2018). *Voorbij de management-maatschappij: de invloed van management op werk, democratie en vrijheid.* Rotterdam: Lemniscaat.

Rietzschel, E. F., Slijkhuis, J. M., & Van Yperen, N. W. (2014). Task structure, need for structure, and creativity. *European Journal of Social Psychology*, *44*(4), 386-399.

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Autonomy and basic psychological needs in human motivation, social development, and wellness*. New York: Gilford.

Schilpzand, P., Houston, L., & Cho, J. (2018). Not too tired to be proactive: Daily empowering leadership spurs next-morning employee proactivity as moderated by nightly sleep quality. *Academy of Management Journal*, *61*(6), 2367-2387.

Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, *38*(5), 1442-1465.

Stoffers, J., Kurstjens, J., & Schrijver, I. (2015). Leadership and New Ways of Working: A Case Study in a Financial Service Organisation. *Journal of Business and Economics Research, 4*(3), 157-162.

Van den Broeck, A., Vansteenkiste, M., Lens, W., & De Witte, H. (2010). Unemployed Individuals' Work Values and Job Flexibility: An Explanation from Expectancy-Value Theory and Self-Determination Theory. *Applied Psychology*, *59*(2), 296-317.

Van der Meulen, N. (2016). The Distance Dilemma: The effect of flexible working practices on performance in the digital workplace (Doctoral dissertation). Erasmus University Rotterdam, Rotterdam. Retrieved September 25, 2019 from http://hdl.handle.net/1765/94033

Van der Heijden, B. I. J. M., Peters, P., & Kelliher, C. (2014). New ways of working and employability. Towards an agenda for HRD. In R.F. Poell, T.S. Rocco, & G.L. Roth (Eds.). (2014). *The Routledge Companion to Human Resource Development* (pp. 542-551). London, UK: Routledge.

Van Steenbergen, E. F., Van der Ven, C., Peeters, M. C., & Taris, T. W. (2018). Transitioning towards new ways of working: do job demands, job resources, burnout, and engagement change? *Psychological Reports*, *121*(4), 736-766.

Wu, Q., Cormican, K., & Chen, G. (2020). A meta-analysis of shared leadership: Antecedents, consequences, and moderators. *Journal of Leadership & Organizational Studies*, 27(1), 49-64.

APPENDICES

Appendix A. Distinctive work principles of NWW according to Bijl (2009)

ICT resources

1. All of the information I need for my work is digitally available.
2. The necessary routine tasks that I have to complete are supported by user-friendly information systems – consequently, I do not need to spend much time on these tasks.
3. I have all the necessary ICT resources (such as a laptop or a smartphone) at my disposal, so that I can do my work at any moment and in any location. It is also possible for me to access all information (systems) when I work outside the office.
4. I often work remotely together with my colleagues and partners. In these situations, ICT support is excellent.

Physical work environment

1. In our office, nobody has a fixed workplace. I can choose any workplace that I want.
2. Our office has different types of work spaces that offer me good-quality support for the work that I do.
3. Our office is an inviting meeting place that I am always glad to visit.
4. I have one or more first-rate workplaces outside of the office, such as my house, my garden, or a satellite office, to name but a few examples. It is true to say that I can work wherever I want.

Human factors and attitudes

1. My relationship with my manager is based on mutual respect and trust.
2. My colleagues give me open and honest feedback. I can handle this well, and I always give my colleagues open and honest feedback too.
3. In my work, I am granted a great deal of freedom and responsibility to decide not only when and where I do my work, but also how I do my work.
4. In my organization, I feel like a true owner and operator. I am given the space and the resources I need to operate, and I know how to use them.

Organization

1. My organization's vision and ambitions are completely clear to me, and I endorse them all.
2. My tasks and goals have been laid down in clear outcome agreements that I support and that assist me in deciding what is important and what is not.
3. The work processes, procedures, and lines of authority in my organization help me to carry out my work well.
4. In my organization, management sets the right example when it comes to conveying my organization's core values; managers themselves follow the rules carefully.

Appendix B. Confirmative factor analysis of NWW Work principles

Items	Component			
	1	2	3	4
ICT resources 1	0.667	0.082	0.215	0.005
ICT resources 2	0.751	0.017	-0.049	0.187
ICT resources 3	0.676	0.190	0.333	-0.003
ICT resources 4	0.697	0.347	0.009	-0.023
Physical work environment I*	-	-	-	-
Physical work environment 2	0.253	0.054	0.150	0.849
Physical work environment 3	-0.096	0.142	0.233	0.854
Physical work environment 4*	-	-	-	-
Human factors and attitudes 1	0.414	0.441	0.115	0.246
Human factors and attitudes 2	0.133	0.462	0.233	0.077
Human factors and attitudes 3	0.318	0.756	-0.046	-0.025
Human factors and attitudes 4	0.062	0.845	0.094	0.103
Organization 1	-0.164	0.465	0.603	0.040
Organization 2	0.030	0.348	0.743	0.119
Organization 3	0.288	-0.183	0.735	0.206
Organization 4	0.299	0.056	0.632	0.219

Note. * excluded from analysis

SAMENVATTING

(Dutch Summary)

Samenvatting (Dutch Summary)

Aanleiding en probleemstelling

Het Nieuwe Werken (HNW) staat voor een verzameling nieuwe werkstijlen en managementprincipes, waarbij medewerkers binnen bepaalde grenzen de vrijheid krijgen om zelf te bepalen hoe, waar en wanneer ze werken en met wie. Het Nieuwe Werken omvat echter meer dan het begrip 'thuiswerken'. Kenmerkend voor HNW zijn Human Resource Management-praktijken (HRM-praktijken) gericht op empowerment, zelfsturing en flexibiliteit, in combinatie met de nieuwe mogelijkheden van informatie- en communicatietechnologie (ICT) voor tijd- en plaats onafhankelijk werken. Uiteindelijk is het doel van HNW dat het werk effectiever en efficiënter wordt gedaan door medewerkers die meer autonomie en werkplezier ervaren. Organisaties hebben de afgelopen decennia een groeiende interesse getoond in HNW, wat recentelijk nog in een stroomversnelling is geraakt door de Covid-19 pandemie.

Er is al het nodige onderzoek gedaan naar de voor- en nadelen van de implementatie van HNW in termen van de fysieke werkomgeving en de invloed van ICT. Onderzoek heeft echter nog nauwelijks rekening gehouden met de meer gedragsmatige aspecten die voortvloeien uit de toegenomen autonomie, verantwoordelijkheid en resultaatgerichtheid binnen HNW. Bovendien ligt de nadruk op de implementatie van HNW vanuit een managementperspectief, maar niet hoe HNW wordt waargenomen, geïnterpreteerd en gebruikt door medewerkers en wat de gevolgen voor hun gedrag zijn. In dit onderzoek wordt aan deze aspecten wel nadrukkelijk aandacht besteed.

Omdat er binnen HNW vooral wordt gekeken naar de resultaten van het werk en minder naar de gewerkte uren, heeft dit gevolgen voor de rol van leidinggevenden: sturing in traditionele zin door controle past niet meer bij medewerkers die meer tijd- en plaats onafhankelijk werken. Samenwerking met collega's wordt steeds belangrijker in één of meer tijdelijke teams, al dan niet virtueel of face-to-face. Wanneer de directe aansturing vermindert, zullen organisaties meer moeten vertrouwen op het proactief gedrag en persoonlijk initiatief van medewerkers die zelf problemen identificeren en oplossen. Daarnaast wordt kennisdeling enorm belangrijk en kan een gebrek aan informatie-uitwisseling leiden tot versnippering en verstoring van werkprocessen. De rol van leiderschap verandert in hoge mate. Het management van organisaties neemt vaak aan dat HNW direct en altijd tot goede resultaten leidt. Daarbij wordt veelal voorbij gegaan aan de vraag hoe medewerkers de nieuwe HRM-praktijken percipiëren en in hoeverre medewerkers daadwerkelijk meer proactief gedrag vertonen. De toegenomen flexibiliteit en autonomie veronderstellen echter een grotere mate van vertrouwen in de eigen kracht

bij medewerkers, die zichzelf moeten motiveren en daarop moeten vertrouwen om het werk gedaan te krijgen.

Verder is er weinig aandacht besteed aan de onderliggende mechanismes die een verklaring kunnen geven hoe medewerkers gemotiveerd worden om proactief gedrag te vertonen om zo tot kennisdeling, creativiteit en innovatie te komen. In dit onderzoek zijn zelfdeterminatie en psychologische empowerment gebruikt als theoretische perspectieven die mede verklaren of en hoe medewerkers in HNW-contexten gemotiveerd worden tot proactief gedrag.

Dit proefschrift bouwt verder op het bestaande HNW-onderzoek en gaat in op een aantal hiaten en beperkingen in de literatuur. Het onderzoek slaat een brug tussen de HRM- en de leiderschapsliteratuur door de relaties te onderzoeken tussen de HRM-praktijken die geassocieerd worden met HNW, leiderschap en proactief werkgedrag van medewerkers. De centrale onderzoeksvraag van dit proefschrift is: “In hoeverre zijn gepercipieerde HRM-praktijken en leiderschap gerelateerd aan proactief gedrag op de werkplek in HNW-contexten en in welke mate medieert zelfdeterminatie en psychologische empowerment deze relaties?”

Resultaten van de studies

Er zijn vier studies uitgevoerd om deze centrale vraag te beantwoorden.

In de eerste studie is een conceptueel model ontwikkeld dat inzicht geeft in de bijdragen van verschillende HRM-praktijken en leiderschapsbenaderingen met betrekking HNW, en hoe deze proactief gedrag van medewerkers op de werkplek kunnen verklaren. HNW wordt in deze studie gedefinieerd als de implementatie van een drietal specifieke HRM-praktijken: tijd-ruimtelijke flexibiliteit, professionele autonomie en toegang tot kennis via ICT. De zelf-determinatietheorie biedt een theoretische lens om de mechanismen die ten grondslag liggen aan het effect dat HRM-praktijken en leiderschap op proactief gedrag hebben, te verklaren. Uitgangspunt is dat medewerkers door HNW-praktijken en leiderschap worden gemotiveerd omdat deze naar verwachting kunnen bijdragen aan het vervullen van psychologische basisbehoeften van medewerkers (autonomie, competentie en verbondenheid), wat vervolgens bijdraagt aan een gevoel van zelf-determinatie en proactief werkgedrag. Verder gaat het ontwikkelde model er vanuit dat leiderschap als managementpraktijk naast de HRM praktijken een rol kan spelen binnen HNW-contexten. Meer concreet is de rol van transformationeel, transactioneel, empowering en gedeeld leiderschap binnen HNW geëvalueerd. Naast de HRM-praktijken die kenmerkend zijn voor

HNW werd ook gekeken naar de potentiele bijdrage van de leiderschapsstijl aan de zelfdeterminatie van de medewerker via de vervulling van de psychologische basisbehoeften. De resultaten van deze eerste, conceptuele studie vormden de opmaat voor de drie empirische studies die in dit proefschrift worden gepresenteerd en waarin een aantal proposities onderliggend aan het model werden getoetst.

In de tweede studie is de relatie tussen HNW, gedeeld leiderschap en proactief gedrag empirisch onderzocht. Binnen de context van HNW hebben teams meer flexibiliteit, autonomie en de mogelijkheid om hun werk op een onafhankelijke manier te organiseren. Verondersteld werd dat medewerkers, zowel individueel als in teams, meer proactief gedrag vertonen en dat gedeeld leiderschap goed past binnen de context van HNW. In deze cross-sectionele studie werd een quasi-experiment opgezet, waarbij medewerkers (N=51) die al zijn overgegaan op HNW vergeleken worden met medewerkers (N=77) die dat nog niet hadden gedaan. Er is een survey uitgezet onder deze twee groepen medewerkers bij een grote bank- en verzekeringsmaatschappij in Nederland. De studie bevestigde dat werken in een HNW-context positief geassocieerd is met proactief werkgedrag binnen teams. Verder bleek dat proactief gedrag in teams op zich bijdraagt een proactief gedrag van individuele medewerkers. HNW kan niet direct geassocieerd worden met meer individuele proactief gedrag. Het onderzoek laat zien dat de relatie wordt gemedieerd door proactief gedrag van teams. In tegenstelling tot de verwachting werd er geen significante relatie gevonden tussen het al dan niet werken in een HNW context en gedeeld leiderschap. Geconcludeerd wordt dat het implementeren van HNW niet direct geassocieerd kon worden met gedeeld leiderschap. Aangezien gedeeld leiderschap in deze studie niet gecombineerd werd met HNW, roept dat de vraag op naar de rol van de formele (team)leider.

Het doel van de derde empirische studie was om, in het verlengde van de tweede studie, onderzoek te doen naar de invloed van de mate waarin transformationeel leiderschap van de formele leider en gedeeld leiderschap samenhangen. Daarnaast is in het onderzoek gekeken naar de relatie tussen leiderschap en kennisdeling. Binnen HNW is digitale samenwerking een gangbare praktijk die risico's met zich meebrengt uit oogpunt van kennisdeling. Er is een survey uitgezet onder R&D kenniswerkers (N=163) in een bedrijf in de voedingssector voor medisch gebruik en die werkten in een HNW-context. De professionele kenniswerkers in dit bedrijf werken samen in teams met een gezamenlijke verantwoordelijkheid voor innovatie en waarvoor kennisdeling essentieel is. De resultaten laten zien dat er een belangrijke relatie is tussen gedeeld leiderschap en kennisdeling, zowel direct als indirect via de perceptie van medewerkers over de vervulling van de behoefte aan autonomie. De transformationele leiderschapsstijl van de hiërarchische leider bleek ook een positieve relatie te hebben met kennisdeling, maar alleen indirect

via gedeeld leiderschap. In tegenstelling tot onze verwachtingen, droeg transformationeel leiderschap niet bij aan de vervulling van de psychologische behoefte aan verbinding en daarmee ook niet (indirect) bij aan kennisdeling. Hetzelfde gold voor de vervulling van de psychologische behoefte aan competentie. Een belangrijke slotconclusie van het onderzoek is dat transformationeel leiderschap en gedeeld leiderschap beide van groot belang zijn als het gaat om autonomie en kennisdeling van medewerkers.

In de vierde studie is empirisch onderzocht in hoeverre flexibiliteit, professionele autonomie en toegang tot kennis (als HRM-praktijken binnen HNW) en empowering leiderschap bijdragen aan proactief gedrag van medewerkers. In deze studie is gebruik gemaakt van een empowerment-perspectief als theoretische lens. Via een survey zijn cross-sectionele data verzameld onder medewerkers (N=342) van een grote Nederlandse bank, die de transformatie naar zelfsturende teams met meer autonomie heeft gemaakt. De resultaten laten zien dat een hogere mate van autonomie niet geassocieerd kan worden met meer proactief gedrag in HNW. Sterker nog, professionele autonomie in het werk heeft een negatief direct effect op proactief gedrag, gecontroleerd voor psychologische empowerment. Verder bleek dat proactief gedrag indirect samenhangt met toegang tot digitale informatie via psychologische empowerment. We concluderen dat psychologische empowerment een uitermate belangrijke rol speelt in de relatie tussen HNW en proactief gedrag van medewerkers. Voor het tijds- en plaats-onafhankelijk werken werd geen verband gevonden met proactief gedrag, noch direct, noch indirect. Empowering leiderschap ten slotte lijkt ook samen te hangen met proactief gedrag, maar alleen indirect via psychologische empowerment. Een andere conclusie van het onderzoek was dat HRM-praktijken en empowering leiderschap complementair zijn. HRM-praktijken hebben betrekking op processen en systemen, terwijl empowering leiderschip betrekking heeft op de relatie tussen de leider en de volger. HRM-praktijken en leiderschap combineren dan ook verschillende perspectieven voor medewerkers en blijken beide belangrijk te zijn voor het motiveren van proactief gedrag binnen een HNW context.

Theoretische contributie

Dit proefschrift draagt bij aan onderzoek naar HNW en flexibel werken door de Human Resource Management (HRM) en de leiderschapsliteratuur met elkaar te verbinden. De studies in dit proefschrift laten zien dat HNW meer vereist dan alleen het introduceren van telewerken of de ondersteuning door digitale systemen. De meeste onderzoeken tot nu toe waren gericht op het HRM-systeem en onderzochten de impact van HRM-praktijken zoals beloningssystemen, selectie en training op proactief gedrag op de werkplek. Deze praktijken worden vaak gebruikt om mensen te monitoren en indirect te sturen. In dit

proefschrift onderzochten we echter de HRM-praktijken die kunnen worden geïmplementeerd om medewerkers te motiveren en te empoweren om zo proactief gedrag te bevorderen binnen HNW-contexten. De studies leveren empirisch bewijs voor de rol van de gedragsaspecten van HNW bij het bevorderen van proactief gedrag op de werkplek. De vrijheid die HNW met zich meebrengt, sluit echter niet aan op ieders behoeftes. Dit resultaat levert een belangrijke bijdrage aan de literatuur over het ontwerp van werk en werkprocessen, en illustreert dat het louter implementeren van professionele autonomie als een HRM-werkpraktijk - zonder enige vorm van ondersteuning of empowerment - niet automatisch leidt tot proactief gedrag. HRM-praktijken zoals plaats- en tijdonafhankelijk werken en toegang tot kennis via ICT zijn wellicht te beschouwen als hygiënefactoren ofwel als noodzakelijke, maar niet voldoende voorwaarden.

Onderzoek naar leiderschap binnen HNW is schaars en richtte zich voornamelijk op persoons-georiënteerd leiderschap, transformationeel leiderschap en zelfleiderschap. De empirische studies in dit proefschrift laten zien dat 'one size fits all'-oplossingen niet voldoende zijn om proactief gedrag van medewerkers in HNW-contexten te stimuleren. Naast gedeeld leiderschap blijven de verticale, hiërarchische stijlen van leiderschap relevant en nodig. Zo bevestigden de onderzoeken in dit proefschrift de verwevenheid tussen transformationeel leiderschap en gedeeld leiderschap. De resultaten ondersteunen het idee dat empowering leiderschap een rol speelt bij het stimuleren van proactief gedrag van medewerkers door de macht en beslissingsbevoegdheid van managers te delegeren naar medewerkers en de psychologische empowerment zoals die door medewerkers wordt ervaren, te vergroten. Empowering leiderschap gaat immers meer over het geven van invloed aan medewerkers dan over het louter hebben van macht en invloed over medewerkers. Deze inzichten zijn belangrijk, omdat al is betoogd dat één van de barrières voor HNW een gebrek aan aansluiting bij het management is in relatie tot leiderschapsstijl.

In dit onderzoek vormden de zelf-determinatie theorie en de theorie over psychologische empowerment de theoretische lens om meer inzicht te krijgen in hoe HRM-praktijken en leiderschapsgedrag, de perceptie van zelfbeschikking en empowerment van medewerkers kunnen beïnvloeden, wat op hun beurt het gedrag van medewerkers beïnvloedt. De zelf-determinatie theorie stelt dat mensen handelen om zichzelf te ontwikkelen, maar dat er omgevingsfactoren zijn die dit proces kunnen bevorderen, maar ook kunnen verstoren. Medewerkers zoeken naar manieren om hun psychologische basisbehoeften te vervullen. Dit onderzoek liet zien dat zelfbeschikking de relatie tussen leiderschap (transformationeel en gedeeld) en kennisdeling medieert met name door in te spelen op de behoeften van medewerkers aan psychologische vrijheid (autonomie) en verbondenheid. Verder bleek dat psychologische empowerment een belangrijke mediator is in de relatie tussen HRM-praktijken, empowerment van leiderschap en proactief gedrag van medewerkers. De

werking van psychologische empowerment verschilt van medewerker tot medewerker. Niet iedereen ervaart in een bepaalde context een even grote mate van empowerment. Bovendien heeft empowerment niet voor elke persoon dezelfde effecten. Dit is het resultaat van individuele interpretatie van de praktijken, het beleid en de vormen van leiderschap binnen de werkcontext van een medewerker. Deze interpretatie heeft ook invloed op het psychische welbevinden van medewerkers. Het empowermentproces kan op deze manier worden gezien als een proces van betekenisgeving.

Tot slot, dit onderzoek draagt ook bij aan de verbinding tussen HRM- en leiderschaps-literatuur in HNW. De resultaten van het onderzoek laten zien hoe zowel HRM-praktijken als leiderschap bijdragen aan het empowerment en het proactief gedrag van medewerkers. Beide disciplines spelen een eigen rol. Medewerkers hebben behoefte aan zaken als autonomie en toegang tot kennis (HRM-praktijken), maar ook aan een zekere mate van leiderschap. Zowel leiderschap via de persoon van de formele leider of via collega's, als ook HRM via systemen en processen kunnen medewerkers motiveren en zo aanzetten tot proactief gedrag. In dit onderzoek wordt benadrukt dat beide perspectieven bijdragen aan ons begrip van hoe medewerkers in een HNW-context kunnen worden gemotiveerd tot meer proactief gedrag op de werkplek.

Management implicaties

De bevindingen in dit proefschrift kunnen in het licht van de actualiteit rondom de Covid-19-pandemie de moeite waard zijn voor zowel organisaties, leidinggevenden, als medewerkers. Terwijl de bekendheid met en de belangstelling voor werken op afstand en de gevolgen hiervan voor zelfsturing in de loop der jaren zijn toegenomen, heeft de recente Covid-19-pandemie de acceptatie van een aantal HRM-praktijken ten aanzien van HNW verder bevorderd en de implementatie ervan versneld. Organisaties die de HRM-praktijken van HNW hebben omarmd, doen dit vaak met de bedoeling om het werk leuker en uitdagender te maken en medewerkers meer te motiveren door hen meer verantwoordelijkheid te geven en hen te betrekken bij beslissingen. Soms wordt er ook gekozen voor ICT-gemedieerd werken omdat dit efficiënter en goedkoper is. Echter tegenwoordig wordt er ook meer gemonitord via surveillance software om controle te kunnen houden op afstand en de productiviteit hoog te houden. Organisaties moeten echter verstandig te werk gaan bij een keuze voor HNW. We concluderen dat medewerkers zich daadwerkelijk gesterkt of empowered moeten voelen door de systemen en processen die in een organisatie aanwezig zijn, evenals door de leidinggevende als door de collega's. Flexibiliteit op de werkplek (als een HRM-praktijk) is een belangrijke factor tegenwoordig, maar speelt geen motiverende rol voor proactief gedrag. Dit geldt wel voor het hebben

van autonomie en toegang tot kennis en informatie. Maar ook hier geldt dat er grenzen zijn aan de vrijheid die mensen aankunnen en als dit niet kadert in het 'grotere plaatje', dan kan dit contraproductief werken.

De onderzoeksresultaten laten ook zien dat vooral kenniswerkers die meer en meer op zelfsturing zijn aangewezen, toch ook enige vorm van leiderschapsondersteuning nodig hebben. Enerzijds is het van belang dat medewerkers professionele autonomie, flexibiliteit en toegang tot informatie krijgen als blijk van vertrouwen. Anderzijds is het belangrijk dat medewerkers zich empowered voelen. Toch blijkt er ook nog een rol voor de leidinggevende weggelegd. De teamleider blijft waarschijnlijk een rol spelen bij het stimuleren van gedeeld leiderschap in zelforganiserende teams. Immers het delen van leiderschapsverantwoordelijkheden in teams binnen HNW gaat niet als vanzelfsprekend. Bovendien kan niet iedereen een hoge mate van autonomie aan; sommige medewerkers hebben behoefte aan transformationele leiders die inzetten op groei van hun medewerkers door ze intrinsiek te motiveren, een inspirerend rolmodel zijn en een visie kunnen uitdragen maar vooral het beste in mensen kunnen boven halen door individuele coaching en ondersteuning. Door medewerkers mee te laten beslissen, zelfleiderschap aan te moedigen, kan empowering leiderschap binnen een HNW context bijdragen in organisaties die willen inzetten op zelforganiserende teams en zelfleiderschap.

Organisaties moeten zich realiseren dat de meeste medewerkers in principe bereid zijn om verantwoordelijkheid te nemen en proactief gedrag vertonen. Het management van organisaties kan de neiging hebben om vanuit een controlerend perspectief medewerkers aan te sturen. Dit gebrek aan vertrouwen draagt niet bij aan proactief gedrag dat zo belangrijk is binnen veel organisaties. Om innovatie en creativiteit te stimuleren is het belangrijk om mensen in hun kracht te zetten. HNW kan daar in hoge mate aan bijdragen door in te spelen op psychologische basisbehoeften. Een belangrijke conclusie is dat organisaties niet (meer) bang hoeven te zijn om medewerkers vrijheden te geven, zoals tijdens de Covid-19 pandemie werd afgedwongen, zo lang organisaties inspelen op deze psychologische basisbehoeften van medewerkers: behoefte aan autonomie, persoonlijke ontwikkeling en verbondenheid. Daarnaast ie het belangrijk dat medewerkers erop kunnen vertrouwen dat ze zelfbeschikking hebben in hun werk, dit werk zinvol is, ze impact hebben en zichzelf kunnen ontwikkelen.

Organisaties kunnen de inzichten en resultaten van dit onderzoek gebruiken voor het ontwikkelen en implementeren van (meer) effectievere en duurzamere HRM-strategieën. Als het gaat om HNW is het aanbevolen om terdege rekening te houden met de verschillende HRM-praktijken en leiderschapsstijlen (en de wisselwerking daartussen) die in dit proefschrift zijn onderzocht.

DANKWOORD

Dankwoord

Een promotietraject starten is als aan een wereldreis beginnen waarvan je op voorhand niet exact de eindbestemming kent en ook niet goed weet welke tussenstations je gaat aandoen. Het ene moment loop je een 'mindfulness' trip naar Santiago de Compostella waarbij je geconfronteerd wordt met je eigen sterktes en zwaktes, en het volgende moment sta je op de top van de Kilimanjaro met het gevoel de hele wereld wel aan te kunnen. Boeiend is om onderweg allerlei ervaringen op te doen en (nieuwe) mensen te ontmoeten die in je geloven, je aanmoedigen en inspireren, soms een stukje met je meereizen of je helpen als het even niet meezit. Op deze reis ben ik dan ook veel van dit soort mensen tegengekomen.

Allereerst natuurlijk de promotoren Rob Blomme en Pascale Peters met aan de start ook Tinka van Vuuren als ad-interim. Jullie hebben er als reisleiders voor gezorgd dat dit een heel bijzondere tocht is geworden. Tinka, bedankt voor je enthousiasme en vertrouwen. Rob en Pascale, de talloze ritten naar Geldermalsen -of eigenlijk Buurmalsen- waren nooit een opgave maar zorgden altijd weer voor inspiratie, nieuwe inzichten maar ook veel (werk) plezier. Rob' s tomeloze energie en positivisme, Pascale 's grote hart voor de wetenschap en jullie complementariteit, werkten voor mij heel inspirerend. Dank jullie wel voor alle inzichten, kritische vragen, constructieve feedback, geloof, vertrouwen en warme menselijkheid. Jullie slaagden er in om gedurende het hele traject mij het gevoel te geven dat ik jullie belangrijkste phd-kandidaat was. Dat is een gave en een kunst.

Op reis gaan en weten dat er een sponsor is die zorgt dat de reis kan doorgaan en de annulerings- en reisverzekering regelt, is een hele geruststelling. Dank je wel Judith Semeijn in het bijzonder als ook de faculteit Managementwetenschappen. Natuurlijk zijn er ook de thuisblijvers die je er aan herinneren dat het werk gewoon doorgaat en hierin steunen. Dank aan de collega's van de vakgroep Organisatie: Be, Marjolein, Dave, Mario, Daniel, Albert, Arne, Irina, Thomas, Lise, Petru, Jol, Alex, Ellen, Tinka, Sarah, en Inge.

Speciale dank aan Kees Gelderman die aan deze reis een vliegende start heeft gegeven en onderweg meermaals voor extra support en bevoorrading heeft gezorgd. Ook dank aan mijn medereizigers van het promotieclubje: Mimi Crijns, Lianne Cuijpers, Guy Janssen, Steven Schoevaart, Rob Vluggen, Boudewijn Janssen maar ook Robin Edelbroek, Paulien van Dorsen, Daniel Kooistra en Petra Neessen die elk op hun eigen manier ook een stuk van de route hebben meegelopen.

Tientallen Masterstudenten van de thesistrack 'HNW en de rol van leiderschap in het Nieuwe Werken' hebben de afgelopen 5 jaar afwisselend een tijdje mee op de bus en de

trein gezeten. Dank in het bijzonder aan Jose Pérez, Koos Wurzer, Reinout Ruiters en Claudia Jongerius, die middels hun eigen onderzoek en organisaties toegang hebben gegeven tot de praktijk van Het Nieuwe Werken. Dank je wel ook aan Jaap Schaveling om een stukje mee op weg te lopen. En veel anderen die mij rechtstreeks en onrechtstreeks geïnspireerd hebben. Dit geldt in het bijzonder voor Susan en Marianne van Moneypenny die van HNW hun professionele activiteit hebben gemaakt.

Onderweg heb ik ook een aantal trouwe supporters ontmoet. Mijn zwem- en (sinds Corona) wandelvriendinnen Carine en Caroline. De tram 5-6 en 7 meisjes Lut en Patricia. De Bèta-buurvrouwen Angelique, Ansje, Els en Lily. Mijn Maastricht-restaurant-maatje Monique. Af en toe is het ook goed om een oase op te zoeken waar even niets moet. Deze oase blijkt niet eens hier ver vandaan te liggen maar wel in Chaudfontaine. Speciale dank ook aan de Kiloknallers die er mee voor gezorgd hebben dat het gewicht tijdens deze trip niet uit de rails is gelopen.

Gelukkig is er ook altijd familie waar je even op terug kunt vallen. Mijn mama met haar eeuwige optimisme waar je altijd terecht kunt en die laat zien dat je nooit te oud bent om een nieuw project te starten. Mijn papa die zelf altijd het voorbeeld gaf om te blijven leren en investeren in jezelf en ondanks dat hij niet van reizen hield, deze reis wat graag meegemaakt zou hebben. Mijn zus Anja die mij geleerd heeft dat wij doorzetters zijn en niet van het opgeven zijn.

Tenslotte, een grote dank je wel aan het thuisfront en speciaal aan Dirk voor het ondersteunen, organiseren en regelen in de afgelopen jaren. Door deze reis heb jij ook talenten ontdekt en ontwikkeld die je eerder niet voor mogelijk hield. En dan zijn er nog twee personen die er niet vrijwillig voor gekozen hebben om mee op reis te gaan maar wel mee in de koffer zaten. Paulien en Matisse, dank voor al de technische, ICT en lay-out adviezen en hulp maar vooral dank voor al jullie grote en kleine avonturen die ik tijdens deze reis ook mocht meebeleven. Jullie hebben er voor gezorgd dat er toch nog enigszins sprake was van een zekere work-life balance. Inmiddels zijn jullie aan je eigen grote avontuur begonnen. En wie weet, gaan jullie ooit begrijpen dat vrijwillig voor dag en dauw opstaan in het weekend geen straf hoeft te zijn.

Ik ben gearriveerd!

Martine Coun
December 2020

ABOUT THE AUTHOR

About the author

Martine Coun (1968) holds a Bachelor and Master of Science degree in Psychology, specializing in Work and Organizational Psychology and a postgraduate Business Administration both from the Catholic University of Louvain (B). After graduating she worked as a research assistant at the University of Hasselt (B). In 1991 she joined the Open University in the Netherlands as an assistant professor of Organization studies. She developed several courses, all based on the principles of distance education in various fields such as Organization Studies, Organization Culture, Organizational Diagnosis, Leadership, and Change Management. In the nineties she published the book Organization and Management: an introduction to the field of Organizational Science which she co-authored with Huibert de Man. She was involved in several Open University projects concerning the combination of didactics, education, processes and digitalization in distance education. Martine was project leader for an institution-wide innovation project aimed at digitizing educational materials and processes. She pioneered the development and implementation of the current tutor system in the Master of Management Program. Martine has teaching experience for courses in MBA, Bachelor and Master programs.

In 2015 she started the Ph.D. research project on the role of HRM practices and leadership in New Ways of Working contexts. Martine has written papers for journals, handbooks and international conferences. She presented her work at international academic conferences, including the Academy of Management Annual Meeting (2017, 2018, 2019), the European Academy of Management conference (2019), the European Association of Work and Organizational Psychology Conference (2017, 2019), The EAWOP Small Group Meeting (2018) and The Dutch HRM (2015, 2017, 2019). She published her work in the European Management Journal, Gedrag & Organisatie, The International Journal of Human Resource Management, and Journal of Leadership studies.

Martine continues to work at the Faculty of Management Sciences of the Open University in the Netherlands where she holds an assistant professor position, and where she is chair of the Program Committee of the BSc Business Administration. She will combine research activities with teaching and development of courses in the areas of organization studies and change. Currently, she is involved in research projects concerning leadership in self-organizing teams and the consequences of homebased teleworking for collaboration in organizations due the Covid19-pandemic.

Open Universiteit